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NASHVILLE JOURNAL

OF

MEDICINE AND SURGERY,

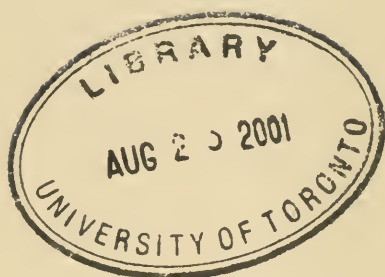
C. S. BRIGGS, M.D.,

EDITOR AND PROPRIETOR.

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NASHVILLE JOURNAL
—OF—
MEDICINE AND SURGERY.

C. S. BRIGGS, M. D., EDITOR.

VOL. LXIX.

JANUARY, 1891.

NUMBER 1.

Original Communications.

PNEUMONIA.

BY E. S. M'KEE, M. D., CINCINNATI, O.

Rodger and Gaume* have written a long article on the toxicity of the urine in pneumonia. They refer to the experiments of different writers, which show that the urine of persons in a normal state of health is poisonous to animals when injected into their veins. They experimented with urine of eleven cases of pneumonia, with the object of determining whether there was any change in the toxicity on this disease. A person in a state of health eliminates three or four more times as much poison when suffering from pneumonia. At the moment of defervescence, the urinary toxicity suddenly increases, and attains or surpasses the normal rate. The urotoxic discharge characterizes the urinary crisis and is the only constant phenomenon. It lasts twenty-four or forty-eight hours

*Rodger and Gaume, Rev. de Med., April and May, 1889.

and attains its maximum on the day of the thermic crisis, or more rarely the following day. After the defervescence, the urine again becomes but little toxic, descending suddenly or gradually to the normal. Physiological analysis reveals the toxicity of the urine, at the time of the crisis, to depend upon different poisons, little known from a chemical point of view.

Schutz,* under orders from the Prussian government, has been experimenting on cattle, by inoculating them with warm lymph from the lungs of cattle suffering from inflammation of the lungs. He found such inoculation afforded immunity from the infectious inflammation.

Netter† relates the case of a woman who gave birth to a child when she was very ill with acute pneumonia. The child lived five days, and at the post-mortem examination, pneumonia at the apex of the right lung was found with double pleurisy, suppurative pericarditis and cerebro-spinal meningitis. A microscopic examination showed pneumococci. The rarity of pneumonia at this age, supports the conclusion that in this case it was due to infection from the mother. A similar infection of the fœtus has been found in rabbits, guinea pigs and mice. The pneumococci sometimes seem to produce pneumonia in the mother and pericarditis in the child, or suppurative meningitis in the mother and pneumonia in the child. Netter has only found three cases of this pneumonic infection in woman. Spleno-pneumonia is reported by Dauchez,‡ Deville,|| and Cheron.§ The cases were characterized by the following symptoms: Flatness, considerable diminution of vesicular murmur, soft blowing, broncho-egophony. To these may be added: Fine crepitations limited to inspirations, preservation of Traube's space and the progressive increase of vesicular murmur from base to summit as recovery advances.

Stephan** reports two cases of paralysis occurring in the course of pneumonia. He gives the details of many others, collected from the literature of the subject, and discusses the opinions of various

*Schutz, London Lancet, Oct. 19, 1889.

†Netter, Le Progres Medicafe, March 16, 1889.

‡Dauchez, La France Medicafe, Dec. 27, 1888.

||Deville, Weekly Medical Review, Oct. 5, 1889.

§Cheron, L'Union Medicafe, July 30, 1889.

**Stephan, Rev. de Medicine, Am. Journal, Med. Sc, June, 1889.

writers. He says paralysis may occur at the beginning of pneumonia, during its course, or in convalescence. The cause of these paralyzes is in some cases a meningitis, but in many others there is an entire absence of gross organic lesion.

The mortality of acute lobar pneumonia is the subject of a study by Townsend and Coolridge,* using as their material the one thousand cases treated in the Massachusetts General Hospital from 1822 to 1839. The average mortality was twenty-five per cent. This gradually increased from ten per cent in the first decade to twenty-eight per cent. at the present. This increase is shown to be deceptive for several reasons: The average age of the patients has been increasing from the first to the last decade. The relative number of delicate and complicated cases has increased as has also the relative number of foreigners. These causes they consider sufficient to occasion the entire rise in mortality. The treatment which was heroic before 1850, transitional between 1850 and 1860 and expectant and sustaining since the latter date, has not, therefore, influenced the mortality rate, the duration of the disease or its convalescence.

ETIOLOGY.

Mosler† reports a number of interesting instances of the spread of pneumonia from one person to another by infection. In one occurrence four persons were attacked by the disease in one family. The father was first taken sick and died on the fifth day. On the day of death his wife was attacked, and also died on the fifth day. The son next became ill, and died the twelfth day. Seven days later the daughter was taken with the same disease, but recovered after a tedious convalescence. The autopsy on the son showed double fibrinous pneumonia, with recent fibrinous hæmorrhagic pleurisy. The autopsy was performed thirty-six hours after death, consequently the micro-organisms were too numerous to permit a satisfactory conclusion. A hypodermic needle was inserted into the daughter's lung. From the fluid withdrawn, a species of bacterium was obtained, having marked and distinguishing features, and clearly belonging to the group of bacteria of rabbit septicæmia, fowl cholera and allied diseases. Thus it was different from Fraen-

*Townsend and Coolridge, *Medical News*, July 27, 1889.

†Mosler, *Deutsch Med. Wochenschrift* 13 and 14, 1889.

kel's lancet-shaped coccus and the so-called pneumococcus of Friedlander. He thinks these cases demonstrate the necessity for the removal and disinfection of the sputum.

Baird* relates the story of a severe epidemic of measles, in a village in the south of France, and finds all or nearly all the fatal cases arose from infection from a single case. This was not only measles but also broncho-pneumonia.

Vernon† considers the burning of natural gas an important factor in the causation of broncho-pneumonia in children.

Porter‡ considers catarrhal pneumonia influenced to a large extent by temperature changes. The extremes of cold are not favorable to the development of acute pneumonia.

The statement of Maraglione,|| that pneumonia is an infectious disease, is, according to Dr. Porter's views, an extreme position, yet the fact remains undisputed, that there is a micrococcus peculiar to pneumonia.

Ballard,§ after a prolonged investigation into a specific pleuro-pneumonia fever, which occurred in Middleborough, in England, decided that it was a specific febrile disease, which must be regarded as infectious, in the sense of being communicable from the sick to the healthy. This resulted from direct relation of individuals and also through the medium of emanations from sewers, drains, etc., which had received sputa or other excreta of the sick, or become infected in other ways. Three cases of a specific pleuro-pneumonic fever has also been reported by Neal.** Cruigneau†† relates a case where a lady contracted pneumonia, and died in eight days. A few days later, her brother-in-law was down with pneumonia, in the same house, and died in eight days. He thought isolation wise, especially of aged persons, and those addicted to alcohol.

Wells‡‡ writes an extensive article on pneumonic fever, contain-

*Baird, *Lyon Medicale*, Jan. 13, 1889, p 43; *Practitioner*, March, 1889.

†Vernon, *N. Y. Med. Record*, Tr. Ind. State Med. So., 1889.

‡Porter, *Med. Register*, April 6, 1889; *Med. Review*, Feb. 23, 1889.

||Maraglione, *Med. Review*, Feb. 23, 1889.

§Ballard, *Med. Chronicle*, June, 1889.

**Neal, *British Med. Journal*, Sept 14, 1889.

††Cruigneau, *Med. Times and Register*, July 20, 1889.

‡‡Wells, *Journal Am. Med. Association*, Feb. 9 and 25, 1889; *New York Med. Journal*, Mar. 30, 1889.

ing a great amount of data, and eight hundred and sixty-two references. He says as to the causation: "There can be no doubt as to pneumonic fever, epidemic as well as sporadic, everywhere and always being due to the action of a single, peculiar and specific morbid material." Baker takes issue with him, and cites his own tables, as also those of Wells, to prove that it is absolutely controlled by atmospheric temperature, or by conditions associated therewith.

Sternberg,* after investigations as to the cause of pneumonia, decides that it is evidently a specific infectious disease, the micro-organism of which is widely distributed. The development of an attack depends rather upon secondary predisposing and exciting causes than upon the accidental introduction of the specific agent.

Seibert† is satisfied that Fraenkel's coccus, described by Dr. Sternberg as micrococcus Pasteuri, would probably cause the more frequent form of pneumonia as the sthenic variety. The asthenic, bilious or typhoid form, on the other hand, is usually produced by the pneumococcus of Friedlander. In his consideration, the most important investigations concerning the germ theory of pneumonia, were those of Rudolph Emmerich,‡ in the state prison of Amber. The main point in the present status of our knowledge is the consideration of fibrinous pneumonia as an infectious disease, the germs of which thrive and multiply in the filth and dirt of dwellings, and we should do in internal medicine as the surgeon has long since done in operative surgery, prevent infection by cleanliness and antiseptics.

Delafield|| regards pneumonia as an infectious inflammation requiring three factors: A pathogenetic bacterium, some exciting cause for the inflammation, and susceptibility. At different times and places, some one of these three factors take precedence.

Clemens§ reports forty-two cases of the severe forms of pneumonia, which were treated exclusively with inhalations of chloroform.

*Sternberg, London Lancet, Feb. 23, Mar. 2 and 9, 1889; New York Medical Journal, Feb. 16, 1888.

†Seibert, Medical Recorder, April 6, 1889, p 385.

‡Emmerich, Medical Record, April 6, 1889.

||Delafield, Medical Record, April 16, 1889, p 386.

§Clemens, Allg. Medical Cent., Zeitungno 21, 1889; Medical News, June 22, 1889;

These inhalations not only alleviate all pain but shortened the duration of the disease. The chloroform is diluted with alcohol.

Fieandt* treated one hundred and six cases of pneumonia with ice. Though ten cases were double, only three out of the whole number died, and the epidemic was not a mild one. The method of application was to use an India rubber bag filled with ice continually over the affected lung from twelve to twenty-four hours after the crisis.

Tordens,† in cases of broncho-pneumonia in children, prefers apomorphia in one to two centigrammes per day. Vomiting from this remedy is not followed by severe prostration. Hydropathy has remarkable efficiency in the broncho-pneumonia of children. It causes deep inspirations, produces a cutaneous derivation, and acts favorably with the vapor of water with which it fills the atmosphere. Tordens envelopes his patient in cold or tepid compresses.

Petresco,‡ since 1883, has treated all cases of pneumonia with large doses of digitalis, and has had eminently satisfactory results. The attack usually aborting by the second or third day, and the physical signs disappear altogether, generally, at the third day. In some cases twenty-four hours have sufficed to enable the patient to return to work.

Nillson|| has used iodide of potassium in fifteen grain doses every three hours, day and night, with a mortality of 5.17 per cent; from one-half to one third his former death rate. The good effect of this remedy is doubtless due, in some degree, to the influence which syphilis exerts on the infectious diseases.

Kreider§ favors baths in those cases only which are not progressing favorably, as they exceed anything in giving relief to all bad symptoms. Difficulty of respiration and lack of secretion should lead to the employment of the baths regardless of the height of the mercury. The bath treatment is capable of shortening the

*Fieandt, *Duodecem* (Finnish), London *Lancet*, Aug. 10, 1889.

†Tordens, *rev. Gen. de chir et de therapue* 43, 1888; *Jour. Am. Medical Association*, Dec. 1888.

‡Petresco, *Bull. Med.*, Aug. 23, 1889; *London Medical Recorder*, Oct. 20, 1889.

||Nillson, *Nordiskt-Medicinskt Bd*, 19, 26; *Occidental Medical Times*, May 18, 19.

§Kreider, *Medical Record*, June 8, 1889.

duration of the disease and convalescence, and of reducing the mortality.

Beyer* has had some experience with antipyrine in pneumonia, which, although not extensive enough to prove anything, yet is extremely suggestive. In his opinion, antipyrine is especially indicated during that stage of pneumonic process during which there is great interference with the circulation, on account of its power of not only stimulating the heart but also of dilating the vessels at the same time.

Lees† has found a very great improvement followed the use of the ice bag, in a great majority of cases. The reduction of the temperature was from three to four degrees, and usually occurred at once. In some slight cases, and in two of broncho-pneumonia in children, the disease seemed to be promptly cut short.

Goodhardt‡ has, for eighteen months, used no other application than the ice bag in acute pneumonia. In eight out of eighteen cases reported a good result followed, the temperature falling promptly, and convalescence being rapidly established. Collapse might occur, but was easily detected and overcome by brandy and warmth.

Pieragnoli|| pleads for the use of ealomel, which he gives combined with opium, and avoids expectorants. The course of the pneumonia was milder, the infiltrations less firm, and the extension of the same more limited.

Green§ has found much benefit from peroxide of hydrogen, a half in a spoonful well diluted in water every hour.

Slosse** considers pneumonia, as a general not a local malady. The localization shows itself late and can occur either in the lungs, the meninges, or in the endocardium. It is infectious and contagious. The cause of the disease is the pneumococcus.

Hirsch†† says that the proportion of cases of rheumatism compli-

*Beyer, Medical News, June 15, 1889.

†Lees, British Med. Journal, Oct. 26, 1889; Lond. Lancet, Nov. 2, 1889.

‡Goodhardt, British Med. Journal, Oct. 26, 1889.

||Pieragnoli, Cent. fuer die Gesamt. Therap., Nov. 1889; Lo. Sperimentale, June 1889.

§Green, Journal Respiratory Organs, Aug., 1889.

**Slosse, Journal de med et chiret de Pharm, April 20, 1889.

††Hirsch, Berlin Klin Wochenschr, Dec. 24, 1888; Am. Journal Med. Sc., March, 1889; Canadian Practitioner, Feb. 15, 1889.

cated with pneumonia, is usually estimated at far too low a figure, as the involvement of the lungs is frequently overlooked.

Pignatari* recently described a form of pneumonia due to malaria. It occurs in marshy districts, July to October, and in persons already weakened by previous malaria. The distinctive clinical feature is the temperature, which reaches the highest point in the morning and its lowest in the evening. The fever may disappear then return again. It is almost always fatal, unless treated with quinine.

Szontagh† reports a case of white syphilitic pneumonia in a child five years old, which was proven on autopsy.

Prudden and Northup‡ have examined morphologically and by cultures, the lungs of seventeen children who died of diphtheria, complicated by pneumonia. The pseudomembranes in all but one of these cases, was shown to contain a streptococcus which was, apparently, the cause of the diphtheria. In all but one of the cases of pneumonia, the lungs contained a similar streptococcus. They were able to induce in rabbits, with the greatest uniformity, a lobular and broncho-pneumonia, by the intra-tracheal injections of pure cultures of the streptococcus, isolated from the children's lungs. They arrived at the conclusion that the acute lobular and broncho-pneumonia, which is apt to complicate diphtheria in the upper air passages in children, is a form of inspiracious pneumonia, induced by the streptococcus diphtheria which finds access to the lungs from the foci of diphtheritic inflammation in the air passages.

*Pignatari, *La Riforma Medica*, Jan. 17, 1889; *British Medical Journal* March 23, 1889.

†Szontagh, *Jahrbeuch, fuer Kinderhelikunde* Bd, 28 Heft 2; *London Medical Recorder*, May 20, 1889.

‡Prudden and Northup, June, 1889.

SURGICAL CLINIC OF W. T. BRIGGS, M. D.,

Professor of Surgery in the Medical Department of the University of
Nashville and Vanderbilt University.

Reported by W. M. Brazelton, Medical Student.

NECROSIS OF THE CRANIAL BONES.

Our first patient this morning, is this colored man, aged 28, a strong vigorous laborer, who was admitted to the hospital about ten days ago suffering from a disease of the bones of the skull. He gives the following history of the trouble: Some months ago, while attempting to pass through a low doorway he struck his head violently against the top of the door-frame, which caused considerable pain and suffering, and in a short time the formation of an abscess, which after a time evacuated itself spontaneously, discharging a good deal of bloody pus. The discharge has continued up to the present time though it has changed materially in character from a considerable consistency to a thin sanious fluid.

The original opening has become much enlarged by ulceration, presenting now as an ill conditioned, ragged ulcer on the anterior half of the right parietal bone with indurated and elevated edges. A probe is readily passed into the opening and brought in contact with bared bone. An opening in the bone is ascertained to exist by the same means. From this history and the presenting symptoms the diagnosis is reached that necrosis of the parietal bone has taken place, the trouble originating from contusion of the scalp. The indication is clearly to remove the necrosed bone, which will be done as follows: The head having been shaved and thoroughly cleansed with an antiseptic solution, the wound is irrigated with a sublimate solution of the strength of 1-2000, Under

ether anæsthesia an U-shaped incision or horse-shoe shaped incision is made so as to include in its center the ulcer and the flap dissected up, exposing the skull at the seat of the disease. The bone is found to be extensively diseased. An opening through the bone of considerable dimensions already exists, so that it will not be necessary to employ the trephine. The opening through the bone is irregular; the membranes of the brain are exposed, covered with granulations; the edges of the bone are soft and spongy. The necrosed portions of the bone are removed with bone forceps, and the gouge forceps, the latter instrument cutting away smoothly the dead bone until healthy bone is reached. In order to remove all the dead bone, you will observe that the original opening has been increased in all directions until a space measuring two inches and a half in length and two inches in width has been exposed. The wound is now thoroughly irrigated with the sublimate solution, and dressed openly, only two sutures being used to close the upper angles of the wound. The wound is packed loosely with marine lint saturated with balsam Peru to stimulate the process of granulation, and covered with a compress of gauze, held in place by a recurrent bandage of the head.

(The wound filled up rapidly with granulations. The patient left the hospital two weeks afterward entirely well).

STRICTURE OF THE URETHRA PRESENTING SYMPTOMS OF STONE IN THE BLADDER.

This gentleman, W. B., aged 45, a farmer, from Lawrence Co., Tennessee, presents himself with the following symptoms of vesical trouble: He has suffered for some time a frequency of desire to urinate, having to void his urine every few minutes. Pain always accompanies micturition but is more intense at the close of the act, and persists for some time afterward. The stream of urine is small; it can hardly be called a stream, as most usually the urine passes in drops, and is not propelled with any force; a sensation of itching is nearly always present in the head of the penis. The patient says that occasionally the urine has been tinged with blood, and that at times the flow of urine has been suddenly entirely checked, to commence again only after considerable violent straining. His general health has become very much impaired by the

great suffering the trouble has caused him, and he is exceedingly anxious for relief.

The symptoms we have enumerated point strongly to the presence of stone in the bladder, and we have brought the patient before you in order to ascertain whether he has stone or not. Ether having been administered, Thompson's stone searcher will be introduced into the bladder, and if a stone is present its presence will be readily detected by it. The contact of the instrument with a calculus may be felt and a clicking sound heard all around the room. On attempting to pass the searcher it is found impossible, the urethra being almost entirely occluded just within the meatus. It is difficult to pass a small probe. A stricture of this portion of the urethra is present, which must be divided before the searcher can be passed into the bladder. This is done by introducing a small probe pointed bistoury through the stricture and incising it freely through the roof of the urethra. The searcher now can be readily passed into the bladder, and careful search for stone made, but none is found. The symptoms which so closely simulated those attendant upon stone in the bladder were caused by the tight stricture just within the meatus. The necessary after treatment will consist in the regular introduction of conical steel sounds.

(The treatment was carried out as indicated. The pain, frequency of micturition and other symptoms all disappeared, and in two weeks the patient returned home entirely relieved).

VARICOCELE—SUBCUTANEOUS LIGATURE.

This young man, John B., aged 23, presents himself for treatment of a scrotal enlargement. The history of the case is as follows: For some years he has observed a gradually increasing enlargement of the scrotum, a heavy dragging pain has been constantly present, aggravated by extra exercise or exertion. The pains at times have been so severe as to incapacitate him entirely from work. The enlargement of the affected parts is not painful upon pressure, disappears when the patient assumes the recumbent position and presents no impulse when the patient coughs. As you may now observe when the parts are exposed, the swelling is very manifest, but is greatest upon the left side, and is broader at the base than at the apex. The testicle hangs lower than natural, and the

enlargement to the touch feels like a knot of earthworms. The condition is known as varicocele or a varicose state of the veins of the spermatic plexus. The cause of the varicosity is gravity and the mechanical interference with the return of venous blood by the pressure of the sigmoid flexure of the colon. The condition is more commonly seen upon the left than upon the right side on account of the fact that the left spermatic vein empties into the left renal vein at right angles and is devoid of valves. Varicocele is a very common disease with young men, two out of every three being subject to it, although the proportion of cases requiring operative treatment is very much less. The diagnosis is not difficult. The peculiar feel, as though grasping a bag of worms, the absence of impulse upon coughing and of resonance upon percussion, and the fact that the varicocele returns while a hernia, that has been reduced, does not descend while pressure is made over the internal ring, will serve to differentiate the disease from hernia, yet practitioners frequently mistake varicocele for hernia, and adjust a truss for its retention. From hydrocele, hæmatocele and epididymitis, varicocele is readily distinguished by the history of the case or by the use of the exploring needle.

When the varicocele is small and gives but little trouble, palliative treatment is indicated, by which is meant regulation of the bowels and the adjustment of the parts in a suitable support as a well-fitting suspensory bandage, frequent cold hip baths, and the avoidance of everything that tends to stimulate the sexual feelings. When the varicocele has become large, and has existed for some time the scrotum becomes very redundant upon the affected side. This patient has used a very ingenious contrivance for relieving this redundancy of the scrotum. The most dependent part of the scrotum has been drawn through a small metal ring, which is held in place by a string around the waist. An operation for a radical cure strongly indicated in the case before us on account of the large size of the swelling, the pain and inconvenience it causes, and by the impression it makes upon the mind of the patient. He has suffered so much pain that he has become practically an invalid.

Accordingly, I shall this morning operate with the object of causing obliteration of the varicose veins by subcutaneous deligation. The parts have been prepared for the operation by shav-

ing the serotum and pubes, and cleansing the parts with sublimate solution. The ligature used is of strong silk, previously soaked in sublimate solution. The needle used is known as Peaslee's needle. The vas deferens having been carefully separated from the bunch of veins, the needle threaded with the prepared ligature is passed between the veins and vas deferens and out through the skin of the opposite side of the fold held between the fingers and thumb. One end of the ligature is drawn through this opening and the ligature removed from the needle. The needle is now reintroduced through the first opening made and carefully insinuated under the dartos in front of the veins, and made to emerge at the second opening made by the first puncture. The ligature having been re-threaded upon the needle, it is withdrawn enclosing in the loop the entire bunch of veins. The two ends of the ligature are now drawn tight and tied. The ends are cut off close to the wound of entrance and the knot disappears within the dartos leaving only the two small wounds of entrance and exit, which will be dressed antiseptically. The ligature becomes encapsulated and is harmless. Little or no inflammatory action will follow, only a slight induration serving to mark the place of operation. Recovery nearly always follows.

(The patient presented no bad symptoms, and in ten days left the Infirmary cured).

Proceedings of Societies.

SCIENTIFIC PROCEEDINGS OF THE ACADEMY OF SURGERY.—RICHMOND, VA., Nov. 11th, 1890.

REPORTED BY JAS. N. ELLIS, M. D., SECRETARY

President W. W. Parker, M. D., in the chair.

The subject for discussion being Dr. Wm. B. Gray's paper on "Indigestion, A Cause of Bright's Disease," Dr. T. J. Moore said:

The subject of digestion is one of paramount importance and has enlisted the interest and claimed the attention of many of the best minds of the profession since medicine was recognized as a science. But there are still mysteries to be solved and difficulties to be surmounted before many of the phenomena connected with this process can be considered as satisfactorily explained. The conclusions which are deduced from experiments in the laboratory are, at best, inferential when considered as a solution of these problems. That there should, therefore, be a diversity of opinion in regard to many of the theories advanced in connection with this question is to be expected.

But there are certain general principles governing the process of digestion which are commonly accepted.

It is well known that the action of the salivary secretions is to convert starch into sugar. It is likewise generally conceded that the reaction of the gastric secretions is acid, and contain a ferment which, by its action upon albuminoids converts them into peptones and reduces them to a soluble form called chyme. This, passing into the small intestine, comes in contact with the

biliary secretions which precipitates the pep sine and assists in the emulsification of fats. The continued conversion of starch into sugar and dextrine is here carried on by the double trypsin ferment. No actual suspension of the action of pepsine occurs. Dr. Foster of Cambridge says that, in addition to its action upon starch and sugar, trypsin co-operates with pepsine in its action upon albuminoids. It is claimed by modern physiologists that the secretions of the small intestines are taking an active part in this process; the glands of Lieberkuhn furnishing a secretion which digests starch, those of Brunnes one which assists in the digestion of albuminoids.

Reaching the large intestine digestion is by no means necessarily suspended, and under certain circumstances the conversion of food substances into soluble form is kept up by its secretions. Physiologists at first claimed that the large intestine offered no secretion to assist in digestion; but experience with nutrient enemmas contradicted them. They then insisted upon the acidulation of these enemmas, saying it was utterly impossible for digestion to take place in the presence of the alkaline secretions of the large intestine. Then they resorted to the peptonising of animals, etc. But it is now known that when the glands of the small intestine are in a state of quiescence, those of the large intestine will take on a vicarious action, furnishing a secretion with considerable digestive power.

One fact which seems to give support to Dr. Gray's theory is that the pouring out of the secretions of both the large and small intestines involves the presence of undigested albuminoids. If albuminoid materials can escape, by exosmosis, externally, why may they not pass, by endosmosis, internally?

It is possible that digestion may be still further continued after the absorption of the materials from the alimentary canal. Bruker states that the portal vein contains casein and milk, which has not undergone digestion; and other authorities go so far as to assert that digestion *continues in the blood*; and it seems as if there must be some manipulating material. For if it was common for undigested albumen to continue in the blood, a healthy man would be a rare exception, as albumen introduced directly into the blood undoubtedly produces albuminuia. But that it finds its way, unchanged, into the blood from the stomach, the speaker does not believe.

Congestion of the kidneys does not constitute Bright's disease. The organ may right itself before reaching the stage of tissue transformation, cell proliferation or other structural change in the pyramids or tubuli uriniferi. There are four leading forms of Bright's disease: 1st, Acute Desquamative or Tubal Nephritis; 2nd, Chronic Desquamative or Tubal Nephritis; 3rd, Acute Interstitial Nephritis; and, 4th, Chronic Interstitial Nephritis. In addition to which there certain ultimate changes in the nature of fatty and amyloid degenerations: all of which, in spite of the difference in their pathological condition, and the diversity and multiplicity of the causes which bring them about, are recognized as forms of Bright's disease. The acute forms may be due to a variety of causes, frequently of a temporary nature; such as irritation, cold, wet, extensive burns, excessive drinking, corrosive acids, pregnancy, and the morbid poisons peculiar to contagious diseases, such as scarlet fever, measles, small pox, diphtheria, etc. The chronic forms have, in addition to the causes above mentioned, long continued chronic indigestion, scrofula, phthisis, abscess, pyemia, syphilis, saturnism, gout, genito-urinary suppuration, or, almost any constitutional form of blood poisoning. In addition to these we have such general and predisposing causes as heredity, cold damp occupations, especially those of a nature necessitating exposure to unusual heat and sudden cooling. It is well to keep in mind the differential points of diagnosis between interstitial and tubal nephritis; albuminuria is often absent in the former, requiring the most delicate tests to detect it. Here we may also expect to find cardiac hypertrophy, increased arterial tension, with proneness to hæmorrhages such as epistaxis, apoplexy, etc. There are few or no casts, while in the tubal form they are plentiful and the urine loaded down with sediment.

The elimination of urea is greatly diminished in Bright's disease, and an approximate return to the normal distillation of urea is an encouraging symptom.

After chronic Bright's disease is unmistakably developed the average physician considers death, within a short time, inevitable. But this is not a necessary consequence. Recoveries do take place, and the return of urea, increase in flesh, diminished arterial tension, and increased digestive capacity are all favorable symptoms.

If undigested albumen were capable of passing into the blood

and of uniformly exciting nephritis, as is claimed by Dr. Gray, arguing from our present knowledge, Bright's disease would be much more common than at present. The clinical fact that sweet milk is commonly used, and successfully, in its treatment, would seem to disprove the correctness of his deductions; and it is no uncommon occurrence to even find the surgeon supplying the needs of a depleted arterial system by the injection of milk directly into the blood vessels.

Dr. W. S. Gordon wished to know if Dr. Gray intended to imply that indigestion is the *sole* cause of Bright's disease?

Dr. Gray replied that in the title of his paper he used the indefinite article "a" advisedly, intending thereby, to indicate that he considered indigestion as *one* of the causes of Bright's disease.

He further said that upon analysis of the causes which Dr. Moore had enumerated however diverse they might at first appear, that they were all intimately seen to be kidney irritants, and as such no matter what their individual nature, will when long continued, result in albuminoids and Bright's disease.

It is not necessary for albuminoids to be digested in order to enter the circulation; and the entrance into the circulation of products which have not been chymified will produce nephritic irritation and Bright's disease.

Cites the case of a lady from a distant city, who was suffering from an unmistakable case of interstitial nephritis, the urine loaded with bile, and ejecting one-seventh its bulk of albumen; feet œdematous; characteristic retinitis, with almost complete blindness, dyspepsia and inability to digest animal food. Had been treated with cod liver oil by the former physicians, in table-spoonful doses three times a day, every dose of which made her sick. The dose was gradually diminished until one-half a teaspoonful was given, but the repugnance continuing, it had to be stopped entirely. When she came into Dr. Gray's hands he put her upon one grain of pepsine and one-half grain of calomel after each meal, and one grain of pancreatine one hour subsequently. In six weeks the casts and albumen disappeared from the urine, and she was soon well. A second case which was not of so long standing, but was, in the main, identical with the case above, was treated similarly with a like happy result.

Another case, equally as significant, could be mentioned in

illustration of the curative value of treatment directed to the digestive system in Bright's disease, clinical facts which the speaker thinks amply sustain him in the opinion that indigestion is a frequent cause of Bright's disease.

Dr. Hugh Blaine quoted Dalton as saying that albuminoids, after being absorbed into the portal vein as peptones, are probably retransformed into albumen, which is a normal ingredient of the blood and so is constantly present in the kidney circulation. He therefore does not look upon the presence of undigested albumen in the blood as a pathological condition or as likely to generate anatomical changes in the kidney. Albumen in the urine is the result of, 1st. changes in the epithelium of the kidney and consequent perversion of its excretory functions. 2nd. pathological condition of the blood permitting the escape of serum by way of the kidney. 3rd. alteration of vascular walls; and 4th. hypertrophy of the heart or other conditions causing increased pressure in the renal veins. Albuminuria therefore, a result, not a cause of Bright's disease.

In answer to a question from Dr. Gordon as to what form of Bright's disease is most apt to result from the absorption of non-assimilable foods, Dr. Gray replies: Interstitial nephritis. In these cases he frequently finds oxalate of lime in the urine.

Dr. Gordon mentioned the case of a patient suffering from chronic interstitial nephritis who is a great pork eater, and thinks high living produced Bright's disease. When indigestion is present and oxalate of lime is formed it becomes a question as to which causes the congestion of the kidneys. Excessive wear, concretions of urine, and oxalate of lime, and other crystals produce nephritic catarrh, which is the first stage of Bright's disease. Is it not reasonable to suppose that these may be almost as much of a nephritic irritant as the undigested albumen?

Dr. Landon B. Edwards next spoke upon

EMERGENCIES OF PARTURITION.

From the moment that woman becomes wife she is continually subjected to what may be called the emergencies of married life. On the very threshold of the conjugal relation we are confronted by instances of fatal hæmorrhages consequent upon rupture of the hymen and vagina. During pregnancy a series of emergencies

are liable to occur, ranging from the most trivial to mortal. The woman pregnant is before us continually as an emergency case. The speaker will not attempt to enumerate all of the accidents incident to pregnancy, but wishes to consider the more critical emergencies requiring prompt, active and skillful interference on the part of the physician.

There is not one of these which is more dreaded than

EXTRA-UTERINE PREGNANCY.

If called to a patient supposed to be pregnant, who for several days preceding the sudden call to her has been the subject of slight discharges resembling the menses but lasting longer than customary, and suffering from severe pain and profound shock, we may pretty safely conclude that we have a case of extra-uterine pregnancy with rupture of the tube; and the prompt use of the surgeon's knife is required.

RUPTURE OF THE UTERUS.

We are progressing naturally in labor when the woman screams out with sudden pain, succeeded by shock in proportion to the degree of rupture, profuse perspiration, blanched face, with or without external hæmorrhage. Upon abdominal palpations we find Schrædy's contraction ring a few inches below the umbilicus. If the head of the child is accessible to the forceps at once apply and deliver, or do craniotomy if necessary. Do not attempt reversion, as we run the risk of enlarging the rent. If this fails we must, without delay, resort to abdominal incision.

PLACENTA PREVIA.

No life should be so dear to obstetricians as that of the mother, and when we encounter a central implantation of the placenta the quickest, surest and best plan is to forcibly tear it from its insertion, even if the child die. There is nothing else to be done in such a desperate case with safety to the mother. It is not feasible to attempt to insinuate your hand through the placenta and turn and deliver. It is much easier and quicker to tear it away and pull the head down.

If an *adherent placenta* does not come away easily, get off as much as possible, and, using antiseptic washes, leave the remainder to be discharged with the lochia.

POST-PARTUM HÆMORRHAGE.

One hour is not the limit to the liability of this accident. The speaker has seen it three hours after delivery, and remains readily accessible to his patient for several hours, with instructions to the attendants to call him upon the slightest indication of flooding. This is sometimes indicated by swelling of the abdomen without external hæmorrhage. In this form of concealed hæmorrhage the indications are to cause the womb to contract, by external manipulations, compression, etc. Failing in this, swab out the womb with a towel or sponge saturated in vinegar, whisky, chloroform, or anything which may be at hand that will constrict the vessels and cause the womb to contract. Don't wait to run to the drug store for some unfailing remedy, but utilize anything which may be at hand in this emergency.

INVERSION OF THE UTERUS

is very uncommon, and is supposed to be due to a fatty degeneration of the muscular fibres of the womb. It may sometimes be replaced by continuous double pressure, one hand in the center, and the other around the neck of the womb.

PUERPERAL CONVULSIONS.

It is important to make a proper diagnosis of the particular form of convulsions we are called upon to treat. Use chloroform, and bleed in the apoplectiform, in the uræmic pilocarpine hypodermically; in the hysterical form, characterized by heavy stertorous breathing with periods of relaxation, use morphine. Chloroform, however, may be used in all or any of these. Beware of convulsions which come on with frontal headache, and go actively to work to eliminate the poison, restricting the patient to a milk diet. Preventive treatment is frequently of the utmost importance. The Doctor wishes to emphasize the necessity for different treatment in the different forms of convulsions. Does not believe in empirical prescribing in these cases. Among other things referred to as emergencies were: Hæmorrhage during labor, vaginal and perineal lacerations, dystochia requiring the use of instruments, delivery of monsters, phantom pregnancy, puerperal mania, uterine inertia, etc.

Dr. C. L. Cudlipp is reminded of a case of rupture of the

womb which occurred in his practice. He was called to a patient on Saturday, who had been in labor since Wednesday, being in the care of medical students. He found her suffering considerably, but not with the characteristic intermittent labor pains, but constant pain, with distended abdomen, tympanitis and rigid os. Called Dr. Warrenen in consultation who advised the administration of morphia. About 7 or 8 that night she was seen by Dr. Chas. S. Mills, and rupture of the womb diagnosed. Assisted by Dr. Thomas J. Moore, the abdomen was opened, discovering the child a putrefying mass, lying outside the womb, where it had evidently been since the Wednesday preceding, and emitting an insufferable odor. The Doctor gathered from the attendants that a black liquid, presumably ergot, had been early administered by the students.

Dr. Thos. J. Moore said that it was evidently a case which had been too much hurried up. The rent in the womb was very extensive, the child lying in the abdomen in a state of decomposition. The operation was skillfully performed by Dr. Mills, but the condition of the woman was such at the time that death was an inevitable result.

The Doctor then spoke of a case of puerperal convulsions, which was remarkable for the exceptional continuance of unconsciousness. She started on the cars from Florida to go to New York, to be delivered. Was taken with violent convulsions on the train between Petersburg and Richmond, and was brought here to The Retreat for the Sick. She was undergoing the eighth convulsion when first seen by the doctor, who bled her profusely, further controlling the convulsions by the use of morphine hypodermically, and chloroform by inhalation, which was repeated upon the recurrence of nervousness and muscular twichings. The child was born, and she made a rapid recovery, *but remembered absolutely nothing of her trip from the time she took the cars in Florida until she awoke after the cessation of her convulsions.*

Dr. W. W. Parker completed the history of the case of convulsions in a boy, aged 4, previously partially reported. He one day had forty-five convulsions, confined mostly to the upper extremities, with complete unconsciousness. Appetite was good all the time. He had convulsions the 18th of the month, when he was circumcised. No abatement of the fits followed the operation.

had from fifteen to twenty seizures a day, with profuse salivation. Gave bromides, and blistered the back of the neck in the outset, then purged freely. On the 8th of October, at the suggestion of Dr. Isaiah H. White, began the administration of iodide of potassium and bichloride of mercury. Convulsions soon began to decrease, and entirely ceased by the 20th October, and since that date the child has been entirely well. The treatment, however, is continued. There must have been an average of twenty fits every four hours for thirty-eight days, which gives a total of seven hundred and sixty convulsions in a little more than a month.

The Doctor next spoke of a case of

TYPHOID FEVER,

the patient being a girl of fine constitution, aged 12. He first saw her the 12th of October. She had complained of headache four days before, but continued at school two days before going to bed, on the 11th. Below is a summary of the case:

October 12th. Pulse feeble, temperature 101° F. Bad expression of face. Diagnosed typhoid fever.

October 13th, Saw her early in the morning. Mind wandering, violent headache, skin hot, neck stiff, temperature 103.5° F, pulse 160 and very feeble respiration not more than 30, nausea and vomiting. Ordered blister on back of head, and ice cap. Saw her twice during the day.

October 14th. Little or no change, except the headache lessened after the blister drew. Vomited a quantity of frothy mucus. The bowels had not moved. Gave solution of 1 gr. carbolic acid and 2 grs. of calomel. The acid stopped the vomiting for a while. Gave at night 20 grs. each of potas, bromide and chloral, by injection, which produced good sleep. Temperature 101° F, and pulse very weak and quick. Not having had an operation from the bowels, an enema was given with good result.

October 15th. No change for the better. Pulse 175 or 180 and very feeble, temperature 100° F, delirium deepening, blind, almost deaf, pupils slightly dilated and almost immovable.

October 16th. Vomiting continuing, and can retain nothing upon the stomach. Ordered enema of milk, eggs and brandy every four hours, which was retained; epigastrium well rubbed

with mustard; vomited the milk and lime water. Asked for consultation, and saw her with Dr. Crenshaw.

October 17th. Temperature 99°F, pulse 160 and exceedingly feeble, respiration 39, skin cool and soft, eyes unchanged, bowels had acted twice but actions small, had taken 6 grs. of calomel in the twenty-four hours and the last movement evidenced the action of the mercury, brain in same condition, cannot understand anything and recognizes no one, tongue dry with white coat. At 10 p. m. temperature was 101.5°F, skin hot, showed her tongue and took whisky and water. R. & C.'s prepared food was added to enema. Passed a good deal of wind, abdomen had been distended and painful, but is now softer, pulse stronger and more steady.

October 18th. Temperature 99°F, pulse 154 and weak, respiration 40. The redness made by the mustard on the epigastrium has very much deepened in color, the blister on the back of the neck began to bleed, would protrude the tongue slightly when asked to do so in a very loud voice, eyes continually closed and have been since the attack began. At 11 o'clock p. m. the pulse was 160 and very feeble, passed a good deal of gas from the bowels, has not vomited at all today, and takes more toddy and milk, swallows very well, pupils very much contracted for the first time, on turning her on her back to examine the blister she expressed her resistance by cries, has not spoken a word for four days. Gave a tablespoonful of whisky and one of milk every hour.

October 19th. Saw patient at 11.30 o'clock, a m. Much worse, pulse 160 and very feeble, temperature 102.1°F, respiration more hurried and shallow, spent a bad night, could not swallow milk today, remained with her till 1 o'clock, p. m., when all the symptoms got rapidly worse, and she died at 2 o'clock, p. m.

The temperature was never higher than 103 $\frac{1}{4}$ °F, and that was in the earlier part of the attack. Several things were peculiar in this case:

First, The profound depression of the nervous system from the first, producing feeble heart action, and consequent low temperature.

Second, The fever heat did not kill her.

Third, The vomiting for four days in the beginning of the attack, showing inhibited nerve power of the pneumogastric, and further depressing the circulation and respiration.

Fourth, No diarrhœa, but constipation, partly due, perhaps, to the reversed peristalsis, consequent upon vomiting.

Fifth, The increased congestion, produced by counter irritants, the redness produced by the mustard plaster upon the neck continued to deepen to the day of her death, and the blister on the back of her head and neck refused to heal, and bled considerably the day before death.

Sixth, The rapid termination of the case, ten days sick, and only eight days in bed.

Seventh, The whole force of the attack being made upon the brain from the first.

Eighth, The Doctor called the attention of the Academy at the last meeting (the second day of the attack), to the remarkably blanched and pinched expression of mouth and nose, and predicted a rapidly fatal termination, saying she would perhaps die by Sunday, which came true.

Doctor Jacob Michaux supplemented the report because he had submitted at the last meeting, that of a child with a continued fever of high grade running a course of fifteen days with a temperature of from 104 to 105° F, and terminating favorably; being peculiar in that there was no ascertainable cause for the high fever. He subsequently attended a case almost identical with the one before reported.

Dr. M. D. Hoge, Jr. finds that campho-phenique effectually dissolves, and checks the extension of the diphtheritic membrane. It is easily applied without dilution.

Selected Articles.

EHRlich'S TEST IN TYPHOID FEVER.*

BY CHAS. E. SIMON, M. D.,

Assistant Physician, Johns Hopkins Hospital.

It has been long known that when amido derivatives of the hydrocarbons of the benzene series are treated with nitrous acid, compounds are obtained which, owing to their instability, and the readiness with which they enter into combination with an almost infinite number of other bodies, especially with aromatic compounds, have become of great practical as well as theoretical importance.

Particularly interesting is the fact that a very large number of our dyes are derived from these bodies. They were discovered by Peter Griess, and termed by him diazo-compounds.

With the expectation of demonstrating by a color reaction, some of the aromatic bodies, the existence of which in the urine had been rendered highly probable by the researches of Baumann and Brieger especially (*Zeitschrift f. Physiol. Chemie*, Bd. 3), Ehrlich undertook a series of carefully conducted experiments in this direction.

A preliminary account of these investigations he published in the *Zeitschrift f. Klin. Med.*, Bd. 5, in 1882, which was followed by a more complete account of his results in the *Charite Annalen*. 8ter Jahrgang, in 1883.

*A paper read before the Johns Hopkins Hospital Medical Society, October 20, 1890.

The practical value of these, especially as regards their diagnostic importance in typhoid fever, has been the subject of much controversy, and it appears at the present day that the so-called Ehrlich's reaction is regarded by many as a medical curiosity of absolutely no diagnostic importance whatever; Petri and Penzoldt are the exponents of this side (Penzoldt, *Berl. Klin. Wochenschrift*, 1883; and Petri, *Zeitschrift für Klin. Med.*, 1884). The manner, however, in which these two observers entirely disregard the instructions, given by Ehrlich, in order to ensure success in the simple experiments, deprives their work of all value, for, as Ehrlich says, "there are but few tests in chemistry which cannot be spoiled by careless manipulation." (Ehrlich, *Deutsche Med. Wochenschrift*, 1883).

A great deal of confusion has also undoubtedly arisen from the fact that the exact color, produced in the experiment, has either been described improperly, or simply spoken of as the "characteristic reaction," a term conveying no idea whatsoever. As the original work done by Ehrlich does not seem to be fully appreciated, it is my purpose here to describe the methods of testing which I have found most useful, and show that my results, on the whole, coincide with those which he obtained.

Since the preparation of chemically pure, crystalline diazo compounds is quite a difficult process, Ehrlich made use of the fact that sulphanilic acid, when treated with nitrous acid in a nascent state, forms in solution the diaz-benzene-sulphonic acid, which thus becomes the active principle in the mixture employed.

The sulphanilic acid used for this purpose, is the para-amido-benzene-sulphonic acid, prepared on a large scale, and used extensively in the coal-tar color industry.

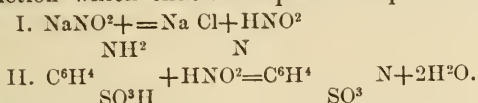
Other compounds, of course, can also be used, as the meta-amido-benzene-sulphonic acid, the ortho and paratoluidine-sulphonic acids, and others, but among all these Ehrlich has found the common sulphanilic acid the most convenient.

Two solutions are employed and kept in separate bottles, the one containing 50cc. of hydrochloric acid, which is diluted to 1000 cc. and saturated with sulphanilic acid, the other being a $\frac{1}{2}$ per cent. solution of sodium nitrite.

To make the test, 40 cc. of the sulphanilic acid solution are taken in a measuring glass, and 1 cc. of the sodium nitrite solution ad-

ded, the mixture being thoroughly agitated. The hydrochloric acid now acts upon the sodium nitrite, forming nitrous acid which, in a nascent state, forms the diazo-benzene-sulphonic acid by its action upon the sulphanilic acid. Small quantites of the sodium nitrite are now used, and the absence of any free nitrous acid in the mixture is thus insured, and at the same time very small quantities of the diazo-benzene-sulphonic are formed—one of the principal requirements, to ensure success in the experiment.

The reaction which thus takes place is represented as follows :



Para-amido-benzene-sulphonic acid. Diazo-benzene-sulphonic.

In his original article, Ehrlich advised the addition of this mixture to the urine, to be tested, in the proportion of 1:1 per volume. If ammonia is added in excess to the urine thus treated, the color play, presently to be described, occurs. In a later communication (*Charite Annalen*, Bd. 11, 1886), he has modified this method by mixing one volume of urine with 5-6 vols. of absolute alcohol, previous to the addition of the sulphanilic acid mixture, filtering, and then adding the acid mixture to the filtrate.

I have found it convenient to add about 50 cc. of absolute alcohol to 10 cc. of urine, filtering and then running into the alcoholic urine, which has become more or less decolorized, the sulphanilic acid mixture from a burette; 20 cc. of the latter are then sufficient, added to about 30 cc. of the alcoholic urine; the addition of the acid in small quantities, for example, 2 cc. at a time, followed by thorough shaking of the urine, is at times advantageous, especially in typhoid fever, when the disease has advanced to a point at which the color reaction is no longer at its original intensity. By the addition of a few drops of ammonia to the final mixture, the characteristic color appears in typhoidal urine to disappear on shaking, and to become permanent after an excess of the ammonia has been added.

I have found a small Erlenmeyer's flask more convenient for the holding urine than the ordinary test-tube, the exact shade of color being more apparent by transmitted light. With this modified method most of my experiments have been performed. There

is, however, a third, which I consider more convenient, less expensive, and more delicate. A few cc. of urine are taken in a small test-tube, and an equal quantity of the sulphanilic acid mixture added, the whole being thoroughly agitated; 1 cc. of ammonia is then allowed to carefully run down the side of the tube, forming a colorless zone above the yellow urine, containing the acid, and at the junction of the two, a more or less deeply colored ring will be seen, the color of which is readily distinguished and noted, the slightest carmine tint being made out more readily by its contrast with the colorless zone above, and the yellow below, than when we are dealing with a uniform color.

This simple modification I recommend particularly, and as it occupies but a few minutes, I am sure it will be found especially convenient by the busy practitioner. As to the color-play which occurs in different kinds of urine, it will be observed that in normal, or pathological, but non-febrile urines, the color of the pure, or alcoholic urines, when method No. II is employed, remains either unaffected or is merely intensified by the addition of the ammonia; a deep orange tint may even be produced in this way, but is of no significance whatsoever, and easily enough distinguished from the typical color. Ehrlich records one exception to this general rule, namely, that in urines containing biliary coloring matters, an intensely dark, cloudy discoloration occurs at times which, upon boiling, is changed to an intense reddish-violet color.

In the course of my experiments I have met with another very interesting exception, but regret that I have but one observation to record on the case, which I owe to the kindness of Dr. Ogden of Milwaukee. The urine of this case contained a substance which reduced Fehling's solution, but did not reduce the subnitrate of bismuth, and merely produced a black discoloration, and in which the fermentation test failed completely. Undoubtedly this was one of the rare instances in which glycuronic acid, first isolated by Schmiedeberg and Mayey (*Zeitschrift f. physiol. Chemie*, Bd. 3 1879), occurred normally in the urine. When Ehrlich's test was applied to this urine, according to the second method, described above, a dark brown color developed on standing for a quarter of an hour, which, at the end of an hour, became almost black. As regards febrile urines, Ehrlich observed the production of an intensely yolk-yellow color, which was even imparted to

the foam when method No. 1 is employed, in rare instances of endocarditis ulcerosa, abscessus hepatis, and intermittens, especially, *i. e.* in diseases associated with well-marked chills.

Now, in typhoid fever, and this of course, is the most important, a color occurs upon the addition of ammonia, which may vary from an eosin to a deep garnet, Here I found method No. II, but particularly No. III, very useful, because with them the production of the faintest rose-tint is more readily preceived than when No. I is employed, owing to the fact that in the second method we are practically dealing with a primarily colorless solution, and in No. III, as above stated, we can take advantage of the contrasts.

If method No. I is used, and there be the least doubt as to the presence of the characteristic color, which may occur in the later stages of typhoid fever, the reaction may be said to be present when the foam which appears on shaking shows a reddish color, and especially when upon standing for 12-24 hours the superficial layer of the sediment shows a green color. This latter is found to be due to the transformation of red soluble coloring matter into an insoluble green body. When the color is of its maximum intensity, of course no difficulty is experienced whatsoever in recognizing the characteristic reaction, the color being then of the most intense carmine or garnet shade.

That this reaction is not dependent upon the presence of any substance, normally present in the urine, Ehrlich seems to have established beyond a doubt, but as to the nature of the substance producing reaction we have absolutely no knowledge. It is possible that careful chemical study of the green sediment will lead to a clue as to the nature of this body, but this, of course, must be left to the hands of the chemists.

Ehrlich has tested the urines of patients, afflicted with almost every known disease, and has arrived at negative results, with some exceptions, typhoid fever, of course, being the most important and interesting. At times, however, he has met with the same in some of the morbilli, and diseases in general characterized by high fever, as in severe cases of plithisis pulmonalis, although it may occur in the latter in the absence of fever, but when present for some time he regards it as a bad omen,

Although I have tested the urine of almost every disease which has occurred in the medical wards of our hospital, besides a num-

ber of specimens taken from healthy individuals, I have only observed it in cases of typhoid fever and phthisis pulmonalis. Not having as yet had opportunity of examining specimens taken from contagious cases, I am unable to express any opinion on these. On phthisis pulmonalis I wish to report at some future occasion. I subjoin a summary of the typhoid fever cases in which Ehrlich's test has been used. The degree of reaction is noted as follows: III signifies very intense; II intense; I marked; $I\mu$ faint.

CASE I.—George N., aet. 35, admitted July 18th, the fifth day of the disease. Reaction on the sixth, seventh, and eighth days, Patient left the hospital before recovery.

CASE II.—Charles B. S., aet. 51, admitted July 2d, the 15th day of the disease. Death resulted on the 24th day of the disease. The reaction was very faint on the 16th-18th day, and absent on 19th day.

CASE III.—Thomas K., aet. 21, admitted July 8th. His primary illness lasted 20 days, and succeeding a period of 7 afebrile days, a relapse occurred lasting 11 days, the case ending in recovery. $T=100^{\circ}\text{--}104^{\circ}\text{ F}$:

On the 7th day of the disease the reaction was III				
"	8th	"	"	" III
"	9th	"	"	" II
"	10th	"	"	" I
"	11th	"	"	" $I\mu$
"	12th	"	"	" 0

Method No. II was used. Not tested in the relapse.

CASE IV.—Frederick T., admitted July 8th. His primary illness lasted 17 days, and succeeding a period of 13 afebrile days, a relapse occurred, lasting 11 days, ending in recovery. $T=100.2^{\circ}\text{--}103.5^{\circ}$.

On the 6th day of the disease the reaction was III				
"	7th	"	"	" III
"	8th	"	"	" III
"	9th	"	"	" III
"	10th	"	"	" II
"	11th	"	"	" I

Method II used. Not tested during the relapse.

CASE V.—Charles E., admitted July 16th, with a possible relapse, the fever continuing uninterruptly for 55 days, and ending in recovery. $T=100^{\circ}\text{--}104.5^{\circ}$. On the 16th day of disease.

reaction was 0. During relapse present for several days III, Method II used.

CASE VI.—John M., admitted Aug. 21st, the fever lasting 35 days, ending in recovery. On 14th day of disease reaction was II.

CASE VII.—Joseph D., admitted Aug. 21st. Death resulted on the 19th day. $T=100^{\circ}$ - 104°

Reaction on the 10th day	III
“ “ 11th day	II
“ “ 12th day	I μ

CASE VIII.—Mary S., aet. 11, admitted Sept 9th. Her primary illness lasted 27 days, and was followed by a relapse continuing for 12 days, ending in recovery. Method II used. Reaction absent throughout. This case and the following, also, occurring in a child, are my only ones in which the reaction, which was expected a priori, was negative. Both cases were of considerable severity, the fever remaining between 103° - 105° for some days,

CASE IX.—Lizzie X., aet. 12, treated outside of the hospital, the illness lasting 23 days. Reaction was not obtained after the 9th day.

CASE X.—Francis H., aet, 18, admitted Sept. 28th. Temperature gradually fell from 104° and ended in recovery.

On the 7th day of	the disease	the	reaction	was	III
“ 8th	“	“	“	“	III
“ 9th	“	“	“	“	III
“ 10th	“	“	“	“	III
“ 11th	“	“	“	“	II
“ 12th	“	“	“	“	I
“ 13th	“	“	“	“	0

CASE XI.—John B., aet. 19, admitted Sept. 27th. $T=99.5^{\circ}$ - 102.5° , reached 104° once. Recovery.

On the 17th ? day of	the disease	the	reaction	was	II
“ 18th	“	“	“	“	I
“ 19th	“	“	“	“	0

CASE XII.—Anton D., aet. 25, admitted Sept. 25th. $T=100^{\circ}$ - 105° . Reaction on the 13 day I μ .

CASE XIII.—Albert S., aet. 55, admitted Sept. 23d. On the 22d day of illness reaction was III; on 14th day the temp. had reached 97.5° - 99.2° , probably indicating a pseudoerisis.

CASE XIV.—James McD., aet. 27, admitted Oct. 15th. A

critical case, temp. 103° - 105° , reduced by baths. Ring method used. Reaction present from the 15th-19th day II.

CASE XV.—Thos. O'D., 23, admitted Sept. 20th. $T=100^{\circ}$ - 104° . often reaching 104° . Reaction on 15th day I.

CASE XVI.—John F., aet. 20 admitted Oct. 9th. Pseudo-crisis on the 19th day; temp. 100° - 104° . On the 16th day no reaction with method II. With ring method present II from 21st-24th day.

CASE XVII.—Samuel H., aet. 21 admitted Oct. 9th. Very mild case; temp. normal from the 11th day. Splenic enlargement still present on 16th day with normal temp. No reaction was obtained.

CASE XVIII.—Timothy M., aet. 24, admitted Oct. 9th. $T=99$ - 103° . Reaction present on the 7th and 8th days III; and on the 9th day II.

CASE XIX.—Otto K., aet. 22, admitted Oct. 6th. $T=100$ - 103° . On 10th day reaction I. Ring method, on 16th day, I μ .

CASE XX.—James D., aet. 18, admitted Oct. 10th. $T=99.5$ - 104° . No reaction on the 22nd day.

CASE XXI.—Charles B., aet. 27, admitted Oct. 15th.

Ring method on 18th day was II.

“ 19th “ II.

“ 20th “ I.

“ 21st “ I.

“ 22d “ I.

CASE XXII.—Robert J., aet. 24, admitted Oct, 7th. $T=100$ - 102° . Mild case. Reaction 0 on 16th day.

CASE XXIII.—Annie S., admitted Oct. 13th. Critical case. $T=100$ - 104.5° .

Reaction with ring method III on 5th day.

“ III “ 6th “

“ III “ 7th “

“ III “ 8th “

“ III “ 9th “

“ 11 “ 10th “

CASE XXIV.—Maggie B., aet. 19, admitted Oct. 13th. $T=100$ - 105° . Critical case. Reaction with ring method present from 14th-21st day III-II.

CASE XV.—Clara W., aet., admitted Oct. 8th. T 101. 104° .

Method two; reaction present on 5th day III.

“ “ “ 6th “ III.

“ “ “ 7th “ III.

“ “ “ 8th “ I.

“ “ “ 9th “ I.

CASE XXVI.—Ed. Y., aet. 13, admitted Oct. 14th. T=101°-104°.

Reaction present on 7th day III.

“ “ “ 8th “ III.

From these cases it will be seen that the reaction was only absent in four cases, of which two were the children above mentioned, one a very mild case, lasting but eleven days, and one tested on the sixteenth day of the disease, at a time when the reaction is not always obtained and, in fact, is usually absent,

CONCLUSIONS.

I. The reaction may be obtained in cases of typhoid fever from the 5th-13th day without any difficulty with methods I and II.

II. With method III it may be observed as late as the twenty-second day, at a time when neither I nor II will yield absolute results,

III. Its absence from 5th-9th day indicates a very mild case, excepting in children, although this rule is probably not an absolute one.

IV. As it occurs previous to the appearance of the rash, it is a very useful aid in the diagnosis in typhoid fever.—*The Johns Hopkins Hospital Bulletin*.

Extracts from Home and Foreign Journals.

SURGERY.

THE EMPLOYMENT OF SPANISH MOSS (*TILLANDSIA USNEOIDES*) AS
A SURGICAL DRESSING.

The holding of raw surfaces in accurate apposition, the abolition of dead spaces, and the exercise of physiological pressure over a wounded area, are essential to rapid healing. To abolish dead space and exert the proper amount of pressure is not always easy and is largely dependent on the material used as a dressing. During the early spring of 1889, when on a plantation in Louisiana, it occurred to me that the moss which hung from the trees would be a soft and elastic wound-dressing, so I brought some home with me. I found later that it could be obtained in a sufficiently clean condition at any upholsterer's, and since the date mentioned I have continued to use it with great satisfaction.

The moss, which hangs in festoons from the branches of trees throughout the Southern States, is of the pineapple family—suborder, *Tillandsia*; species, *usneoides*. Stem thread-shaped; pedicle short; one-flowered, (Gray). On the trees it is of a gray color, very curly, and is prepared for commerce by being dried and beaten so as to free it from bark. After this process it appears to consist of black, elastic, tough fibers, resembling curly hair.

I usually have the hair made into cushions or pads of about six by four inches, and two inches thick, cheesecloth being the material employed as a covering. The pads have been made of other dimensions; in one or two cases of mammary extirpation with extensive axillary dissection, pads large enough to envelop nearly one-half of the throat were employed, but I find no ad-

vantage in the use of such large cushions, and the size given has proved very generally applicable.

The pads are adjusted outside of a gauze-and-cotton dressing, and the bandage applied snugly, the elasticity of the moss serving to distribute the pressure evenly. About the chest wall, as after a deep axillary operation, I have been especially pleased with the pads. A fact of a good deal of importance is that when exposed to the action of moist heat in a sterilizer the moss remains elastic, so that the cushions are prepared with the other dressings for each operation.—*Med. News*.

STERILIZATION OF RUBBER CATHETERS.

Dr. Alapy (*Annales des Maladies des Grganes Oenito-urinaires*, July, 1890) describes a new method of effecting the sterilization of these instruments, which possesses, he asserts, the merit of being very effective, easy to carry out, and harmless to the instruments. After drawing attention to the effects of various antiseptics, such as carbolic acid, sublimate, etc., and heat as ordinarily applied he goes on to describe his own plan, which practically consists in wrapping up the instruments, not more than three or four in a packet, in ordinary blotting paper, the ends of which are just twisted up. These packets are then placed in glass tubes, the mouths of which are sealed with a plug of cotton wool. The glass tubes are exposed for half an hour to ordinary steam, that is to a temperature of 100°C. The packets of blotting paper are then removed, and kept in a drawer or box till they are required for use. They remain sterilized for any length of time, provided the paper is not opened, as is shown by the fact that they are incapable of infecting either sterilized bouillon or sterilized urine.—*British Med. Journal*..

WOUNDS OF THE LUNGS.

It seems to the writer that we have, in the case of gun-shot wounds of the lung, a condition closely analogous to similar wounds of the abdomen; we have the same dangers to meet and overcome, modified merely by peculiarity; our means of meeting these dangers are more direct in the case of abdominal wounds than in the pulmonary, but, nevertheless, we have such means in the free incision and drainage as above proposed, therefore we are,

from a surgical standpoint, justified in employing the procedure, and it is the firm belief of the writer that, if used, we may look forward hopefully to the result, and that the prognosis in such cases will be much bettered thereby.—Axford, *Med. Standard.*—(*Times and Reg.*)

TREATMENT OF HIP-DISEASE.

In the second stage it is advised to make subcutaneous division of the capsule as follows: A small incision is made into the skin over the posterior to the trochanter major; with a strong probe or a dull grooved director I explore my way, separating the tissues down to the capsule; a small knife with a long neck, such as a tenotome, is then inserted alongside of the director down into the capsule, separating it freely; the fluid escapes into the surrounding tissue and is then absorbed. There is a very little hemorrhage. The patient then enjoys rest. The parts are put in complete fixation with a pair of wire breeches, or similar apparatus that will answer the purpose. Nature, assisted by hygienic treatment, complete the work; the patient recovers within two or three months. According to my experience, nothing can be accomplished with the so-called extension and counter-extension.—*Med. Index.*

MEDICAL.

EXALGINE.

First, it is almost of as much benefit to mankind to determine the minimum efficient dose of a drug, as it is to fix the maximum dose which may be given without poisoning or incommodating the patient. I take it that a one-grain dose every four hours is the standard of exalgine. Secondly, as the pain-subduing property methyl-acetanilide is largely referable to its methyl molecule, and acetanilide itself possesses a much greater heat-suppressing power, I suggest the following prescription in cases where both actions are desired: \mathcal{R} Antifebrin, grs. xxiv.; exalgine, grs. vj.; tr. limonis, āā 3 j.; aquam. ad 3 iij.. M. Sig. A tablespoonful to be taken every four hours. In a series of cases which I have treated within the past two months, and especially where the pain was limited to one temple, or ‘‘nail’’ like, I have found even one

five-grain dose of phenacetine to give the most striking pain-subduing result.—*Brit. Med. Jour.*

SPERMIN.

In consequence of Brown-Sequard's well-known statements as to the rejuvenating power of hypodermic injections of semen, says the *Brit. Med. Journal*, October. 18, 1890, renewed attention was given to an alkaloid found in the seminal fluid. The alkaloid was named spermin, and the hydrochlorate of spermin has been administered hypodermically by Professor Poehl, in a large number of cases with alleged beneficial effect. He states that it acted as a general stimulant in many forms of chronic disease, and his results have been confirmed by a number of other Russian observers. Dr. Paul Werner devotes a long article to an exhaustive criticism of these results, and shows that most of the cases reported were of such a nature that improvement often takes place spontaneously without other treatment than rest and the improved hygienic condition consequent on coming into a hospital. In no case was the benefit derived of a striking or unusual character. In other cases (as with Brown-Sequard himself, according to Dr. Werner) the tonic effect was strictly psychological, the temporary increase of strength being due to the excitement of the experiments and a confident hope of their results. The author illustrates his argument by pointing out that similar results have been obtained by many forms of charlatanism. At the Tenth International Medical Congress, Professor Poehl read a paper on spermin before the Section of Pharmacology. Several members, however, disagreed entirely with what he said, and Professors Schmiedeberg and Kobert both stated that they had found spermin to be an inert substance, and that it could in no sense be regarded as a stimulant.† Spermin‡ has been known under various names since 1851—as Chareot's or Chareot-Neumann crystals, as the asthma crystals of Leyden, and as Schreiner's crystals. In 1865 Boettcher found them in semen, and they have been obtained from the spleen, the blood, and the spinal cord, white of an egg, sputum, and old anatomical preparations. In 1888 Ladenburg and Abel established their identity with ethylenimine. The alkaloid resembles other ptomaines chemically, and when free has the odor of fresh semen, the same odor sometimes found in spu-

tum being also no doubt due to its presence.—*Boston Medical and Surgical Journal.*

MORVAN'S DISEASE.

In this lecture Charcot draws special attention to a disease first described in 1883 by Dr. Morvan, of Brittany, of which several cases have been recorded. The disease affects the upper, rarely the lower limbs, and is characterized by neuralgic pains, by wasting and anæsthesia, affecting forearms and hands, and also by what is regarded as pathognomonic—the occurrence of whitlows on the fingers. As a rule, the whitlows appear last, so that the anæsthesia is already established, they are not painful. It was the occurrence of a painless whitlow which first drew Morvan's attention to the disease. Sometimes, however, the first whitlow is painful, while those that occur subsequently are not. There are also present other trophic changes in the hands, such as cracks in the skin, deep ulcerations, coldness and lividity of the extremities, with profuse sweating. The nails also become shrundened and atrophied.—*Brain.*

OBSTETRICS.

TWINS BORN FIFTY THREE HOURS APART.

The following case seems worthy of record: Twins were born to a Mrs. M., residing in Lowell, one on January 24th, 1890, and the other January 27th—fifty-three hours apart. There was a single placenta, the two cords being attached about an inch apart. No effort was made to remove the placenta immediately after the birth of the first child—as is customary. The first child was very delicate, and the mother said she thought that the birth was premature. She acceded, therefore very willingly to my suggestion, that we let Nature take her course and wait patiently for the birth of the second child. The first child lived only two weeks, but the second was strong, fat and healthy, has continued so to this time. There could not therefore have been a premature birth.

It has occurred to me that, perhaps in many other cases there would be a very considerable delay in the birth of the second twin, if there was no interference with Nature. In this case,

while the patient and her friends were willing to wait for the birth of the second child, I had great difficulty in persuading them to allow the placenta to remain undisturbed. With the first child the first stage of labor lasted five hours, the second stage half an hour. With the second child she was in easy labor about three hours, though we could hardly say that there was a first stage. The os did not firmly contract during the interval.—*William H. Laphrop, M. D., in The American Lancet.*

PILOCARPIN IN ECLAMPSIA.

Pilocarpin may be said to be on trial as a remedy in the dreaded convulsions of eclampsia, and it is important to note the results which are from time to time reported by competent observers. On the whole the reports are decidedly favorable, and a case recently published in a French cotemporary shows clearly enough that in certain cases the drug may be relied upon to conjure the attack. In this particular case the attack had come on during labor, and was not relieved on the evacuation of the contents of the uterus; indeed, the condition of the patient on the following day was simply desperate. The injection of a third of a grain of pilocarpin at the critical moment is reported to have produced a most remarkable effect. After an abundant diaphoresis lasting over half an hour, the pulse returned in the radial arteries and the surface temperature was restored. No further convulsions occurred, and in the course of a day or two the injections continued night and morning, albumen disappeared from the urine, the patient becoming convalescent. The effects were too clear and too prompt for the results to be attributed to any other influence, and the remedy is one which should always form part of the *armamentarium* of the obstetric physician.—*Med. Press and Circular.*

THE AFTER HISTORY OF A CASE OF CÆSAREAN SECTION.

In the *Lancet* of Aug. 14th. 1886, is published an extremely interesting case of Cæsarean section performed by my friend Dr. Thompson Forster, of Daventry, for extreme pelvic contraction. The operation was performed on May 16th of that year at the full time after a prolonged and ineffectual attempt at labor. The patient had a very risky convalescence for seventeen days, the temperature running up to 105° and the pulse to 140, with delirium

and diarrhœa. The subsequent history of the patient is extremely interesting. She became four times pregnant, and in the first three of these occasions premature labor was induced at the fifth month. Both patient and husband in this instance were greatly distressed at her inability to bear a living child. She recognized the fact that she was again pregnant at the beginning of March of this year, and applied to Dr. Edgar Underhill, of Bromsgrove, for advice on the subject, and he advised her to place herself under my care for the purpose of having the operation of amputation of the pregnant uterus performed at the full time of labor. I admitted her to the hospital about August 20th, when she estimated herself to be within a few days of her full time. Labor began on the evening of August 27th, and had distinctly progressed on the morning of the 28th, when in the presence of Drs. Leake and Pace (Dallas Texas), Dr. Underhill (Bromsgrove), and Drs. Martin, Hamilton, Gray, Baker, and McColl, I performed the operation in the method which I have adopted and repeatedly described, delivering a fine living male child. The patient made an uninterrupted recovery, the highest pulse record being 108. The clamp came off on the fifteenth day, and the patient was out of bed on the nineteenth, and went home on the twenty-fifth day after the operation. Her own statement about it is that she suffered less from this operation than she did from any of the previous experiences through which she went in order to be delivered of her children.

Editorials, Reviews, Etc.

PUBLISHER'S NOTICE.—The JOURNAL is published in monthly numbers of *Forty-eight pages*, at one dollar a year, to be always paid in advance.

All bills for advertisements to be paid quarterly, after the first insertion of the quarter.

Business communications, remittances by bill, either by money-order, draft, or registered letter, should be sent to the Editor, C. S. BRIGGS, M. D., Cor. Summer and Union Streets, Nashville, Tenn.

All communications for the JOURNAL, books for review, exchanges, etc., should be addressed to the editor.

CHANGES.

On the threshold of the New Year, the NASHVILLE JOURNAL OF MEDICINE AND SURGERY sends warm and earnest greetings to its kind friends and patrons. Established forty years ago in the prosperous ante-bellum days of the Sunny South, by one of the most original writers that ever graced the medical editorial tripod, the late W. K. Bowling, M. D., it has in that period been edited at various times by a number of distinguished men, some of them dead, others still living, all of whom, with varying degrees of success, strove to maintain the high character of the JOURNAL won for it by its founder,

For nearly half a century the JOURNAL has lived with all the vicissitudes of fortune incident to journalistic enterprise. Always true to the principles that should govern the conduct of a medical periodical, upholding regular and honorable medicine, condemning all dishonest medical dealings that seek to make capital out of the credulity of mankind, quick to applaud advanced thought, ready at all times to expose fraud, the NASHVILLE JOURNAL OF

MEDICINE AND SURGERY presents a record of which it may well be proud.

In the future, as in the past, the editor will do his utmost to keep the JOURNAL up to the standard of excellence raised for it by its originator. Conscious of remissness in the years that have gone by, he has determined to devote all his energies to the improvement of the JOURNAL. Having again obtained full control of all its departments, he promises his readers a first-class medical periodical in every particular.

As the first step toward the fulfillment of this promise, the editor has effected a complete change in the make-up of the JOURNAL. The first number of January, 1891, appears in new and changed type, new paper, new cover, and new form—so that in appearance at least it will compare favorably with any of its cotemporaries. The editor bespeaks for the JOURNAL the support and patronage of an always liberal profession, not only in the way of subscriptions, but also of contributions, both of which essentials to ultimate success will be thankfully received and duly appreciated. And, now in closing, the JOURNAL wishes its readers, each and every one, a Happy New Year, and imbued with the same feelings that prevade the being of the *genus homo* when arrayed in new and well-fitting garments, it is ready to re-echo the kindly sentiment, “peace on earth, good will to men.”

Short practical articles for the original department of the JOURNAL are earnestly solicited. Practitioners are requested, if too busy to prepare their papers for publication, to send full notes of such cases as they may think of interest to their fellow practitioners, to the JOURNAL. Contributors will receive, upon application, a reasonable number of extra copies containing their article.

Reprints will be furnished in pamphlet form at reasonable prices.

THE KOCH METHOD.

Although active experiments with the Koch lymph, in the treatment of tuberculosis, have been prosecuted in Berlin for three months, and for a shorter time in this country in the hospitals of the larger cities fortunate enough to secure the valuable preparation, nothing positive and definite can yet be said to have been arrived at, and the profession is but little if any wiser now than when the startling announcement was first made as to the true value of the treatment.

Of all the cases yet experimented upon not one can be brought forward as an instance of perfect cure. Even in the treatment of lupus, in which the benefits of the lymph injection was thought to have been most positive, subsequent developments have shown a number of cases pronounced cured in which the relief was but temporary. The profession is growing dubious. Pasteur, and the great body of French physicians, are skeptical in the extreme as to the benefit of the treatment. Unknown dangers are thought to surround the injection of the powerful poison.

Koch has been greatly blamed in many quarters for keeping the nature of the material he uses secret, but that he does it from no selfish motive is apparent from the following, obtained, we think, from the *Medical News* :

"After going to press we received the following cable from Dr. Harold Ernst in Berlin, under date of December 10:

"The secret of making Koch's material has been turned over to the German Government only until a thorough trial can be made. The effect in lupus and surgical tuberculosis is most striking, because the results can be seen. The most wonderful property is the selective affinity for tuberculosis nidus, often making latent centres active. Pulmonary tuberculosis will have to be under observation for a long time still before permanent result is determined. The action of the material is certainly as wonderful as that of any known medicine.'"

It surely can not be a great while before the real value of this method will be at least approximately proved. In the meantime

we must content ourselves with waiting and watching, ready at the moment the discovery is pronounced to be a success, to join the rest of the world in heaping up praise upon the tireless worker for the good of his fellow man, Koch, a benefactor in the fullest sense of word.

VALEDICTORY CONTEST.

In accordance with the custom of the students in the Medical Department of the University of Nashville and Vanderbilt University, an oratorical contest between the aspirants for the valedictory honor of the graduating class of 1891, was held in the Watkins Institute Hall, on the evening of Dec. 6, 1890. Despite the inclement weather, a large audience of ladies and gentlemen had gathered together to grace the occasion. Prof. T. Menees had been chosen to preside over the meeting, and, it may be truthfully said, that the distinguished professor never shone to better advantage. The exercises, under his skillful guidance passed off with marvelous smoothness. The address of Prof. Menees was graceful, appropriate and, as usual eloquent.

The exercises were enhanced by music, furnished by the Italian band.

Three speakers from the class posed as candidates for the suffrages of their classmates, whose names, and the subjects of their addresses are as follows:

Kirby H. Smith, N. C.; subject, "Henry W. Grady and the South."

S. D. Thatcher, Tenn.; subject, "The Power of Eloquence."

F. M. Williams, Tenn.; subject, "Elements of Happiness,"

The orations, one and all, were commendable in the extreme for composition and for the manner of delivery, and we feel assured that the class would have been worthily represented by any one of the three.

The election that ensued upon the contest resulted in favor of F. M. Williams, who was elected upon the first ballot. We cheerfully endorse the choice, for we know the class will have no reason to regret its selection of valedictorian. Dr. Williams comprises within himself all the elements of a good valedictorian—a thorough gentleman and a good scholar, a hard student, and he is withal a good looking man. He will reflect honor upon himself and his class on the momentous occasion of the commencement exercises of February, 1891.

TO OUR SUBSCRIBERS.

In obedience to the demands of the times, which is to furnish the best possible reading for the least possible money, we have concluded to reduce the subscription price of the JOURNAL from *two* dollars per annum to *one* dollar per annum, a departure which puts the JOURNAL within the reach of every one.

We would not have it though that this means that the JOURNAL will deteriorate in usefulness with the reduction in subscription price, on the contrary we are going to endeavor to make a one dollar journal worth two dollars to the subscriber. Since arranging change of the JOURNAL, we have increased its circulation by the addition of two hundred and fifty name; and we are going to add as many, if not more, to the list every month. Every physician in the State of Tennessee, especially, and in the South and West, generally, should subscribe; and, when sample copies of the new issue are seen, we think the large majority will subscribe. One dollar is a small sum to ask for a forty-eight page monthly, and we intend to make the JOURNAL in every way worth the money. Take the trouble, all of you who may see this, if you have not already done so, to send in your subscriptions at once, in postal order, registered letter, or if more convenient, in postage stamps.

In this connection we would beg those of our subscribers who are in arrears to remit without delay, and renew their subscriptions under the new management. It is not much to them but much to the JOURNAL, and we hope they will take the little trouble required in transmitting money by mail to liquidate their past dues—showing in this substantial way their desire to help us in our laudable intention to improve the JOURNAL. We beg you not to delay, but attend to it as soon as convenient.

THE NASHVILLE ACADEMY OF MEDICINE.

The Nashville Academy of Medicine will hold its next meeting in its elegant and spacious rooms in the new building, next to the Vendome Theater, January 8th.

This society is to be congratulated upon its flourishing condition. It has a large membership, a regular attendance of between twenty-five and forty, by carefully prepared papers, and its meetings are characterized by animated discussions. During the coming year we hope to present to the readers of the JOURNAL such papers read before this body as may be secured, promising them for the February number an excellent essay upon Ectopic Pregnancy, presented at the last meeting, etc. 57th, by Prof. Richard Douglas.

The officers of Academy are Dr. Jas. B. Stephens, President; Dr. G. W. F. Price, Secretary and Treasurer.

By far the most valuable calendar for 1891 is the Columbia Cycle Calendar and Stand, issued by the Pope Mfg. Co., of Boston, Mass. It is in the form of a pad containing 366 leaves, each leaf having on it date, day of the week, day of the year, and number of days to come, a paragraph pertaining to cycling or some kindred subject. The leaves are fastened only on the end, so that each entire leaf can be exposed. The stand is made of

stained wood, brass mounted, with pencil holder and pen rack. Although this is the sixth year of the Calendar, the matter is fresh and new, the larger number of paragraphs having been specially written for this purpose.

BOOK NOTICES.

THE MEDICAL BULLETIN VISITING LIST, OR PHYSICIAN'S CALL RECORD. Arranged upon an Original and Convenient Monthly and Weekly Plan for the Daily Recording of Professional Visits. New Edition. Philadelphia and London. F. A. DAVIS, Publisher.

This visiting book will commend itself to physicians in being compact and conveniently arranged. It is so arranged that each patient's name is written but once—the attendance for a month's time being recorded on attached stubs. The table of contents shows a number of novel features which go far towards making it serve as a book of ready reference as well as a visiting book.

THE MEDICAL NEWS VISITING-LIST. 1891. Thirty patients per week. Philadelphia. LEA BROTHERS & Co.

We consider this visiting list the best of all. For several years we have used in our practice one of this kind, perpetual edition, and so well pleased have we been, that we shall continue to use it. It is the perfection of physicians visiting lists.

WEEKLY MEDICAL REVIEW POCKET REFERENCE BOOK AND VISITING LIST. PERPETUAL. J. H. CHAMBERS & Co. Philadelphia and St. Louis.

This is a most excellent visiting list. It is compact, well arranged, and in every way meets the needs of the practitioner. We have used this list for a part of a year and have been greatly pleased with it.

THE PHYSICIAN'S VISITING LIST (LINDSAY & BLAKISTON'S) FOR 1881. Fortieth year of its publication. Philadelphia. P. BLAKISTON, SON & Co., (Successors to Lindsay & Blakiston), 1012 Walnut St. Sold by all Booksellers and Druggists.

This excellent visiting list is the oldest published, being well-

known and used by the profession for forty years, It maintains most of its original features, and is suitable to all the needs of the practitioner. It needs no introduction, for no visiting list pocket book has ever become half so generally used, and it will, we are sure, keep the lead among similar publications.

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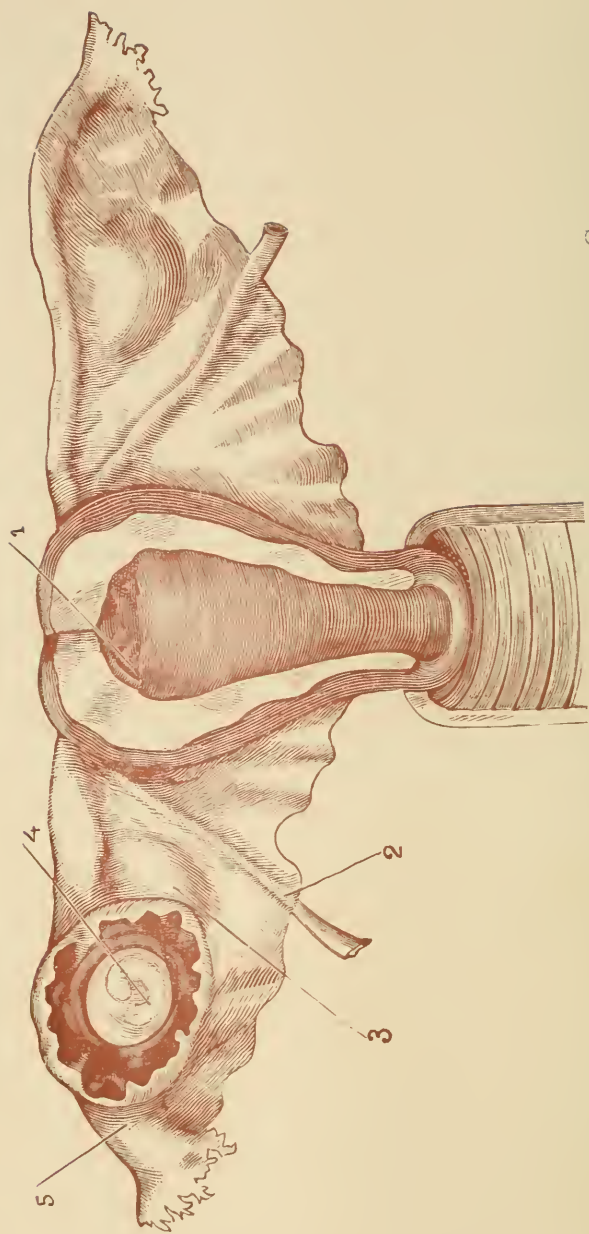
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SPECIMEN FROM LILA STORRS.—DR. DOUGLAS' CASE.

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| 1.—Patch of Decidua Vera. | 3.—Right Ovary. |
| 2.—Round Ligament. | 4.—Vesicle in Fruit Sac. |
| | 5.—Fallopian Tube. |

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ECTOPIC GESTATION.*

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The recent revelations in abdominal surgery afford abundant light for the study of the hitherto dark subject of ectopic gestation.

The simplest and most comprehensive definition of extra-uterine pregnancy is "the fixation and development of an impregnated ovule outside of the lining membrane of the uterus" (Thomas), a definition applying not only to the location of the child but to its placenta also.

In the study of any scientific subject, old authorities, whose ideas are kept constantly bright by the pilfering hand of the plagiarist, must be read and considered with the same deference we accord our senior colleagues in consultation practice. Patiently listen to their long and oft told tale of experience; let them

*Read before the Nashville Academy of Medicine and Surgery, December 27th, 1890.

dilate upon their intricate but obsolete pathological problems; reserve your judgment, accept only that which accords, and in time of action be master of the patient and yourself.

Let us enter into consideration of this subject by some passing comment upon the physiology of impregnation. Many of the long taught theories upon the relation of ovulation to fecundation are now boldly challenged as purely speculative, if, indeed, not entirely false. Let us not, however, commit the characteristic American error, and be off with the old and on with the new too soon.

It is dogmatically taught in all works on physiology, and by distinguished writers upon obstetrics and gynæcology, that the seat of contact between the ovum and spermatozoon is not accurately determined, but all agree that fecundation usually takes place on the ovary itself, or somewhere in the canal of the Fallopian tube, all basing their argument upon the idea that after intercourse the spermatozoa at once make their way through the uterus into the Fallopian tubes and on to their fimbriated extremity, and cite as definite proof of this route of travel, that Bichoff, Wagner, and others, have seen the spermatozoa on the surface of the ovary. Now, since it is the usual custom of every writer, speaker or teacher upon any subject, gynæcic or obstetric, to shout loud and oft the name of Barnes, I shall not be remiss in my homage to the patron saint of the obstetric world, and remind you that "*Barnes says*" the functions of the Fallopian tubes are two-fold, "first to convey liquids and the ovum to the uterus; second, to receive and transmit towards the ovary the spermatozoon."

In contradiction of this statement Mr. Tait says the function of the cilia lining the Fallopian tube, is to prevent the entrance of the spermatozoa and to facilitate the progress of the ovum to the uterus, its proper nest. This is done by the movement of the cilia, which is toward the uterus from the ovary.

"The statement that impregnation takes place before the ovum has reached the uterus seems to be an assumption based upon insufficient evidence."—*Tait*.

Tait, Wyder and Johnson regard the uterus as the meeting place of the ovum and spermatozoa, a theory held in opposition to the majority of authors.

Since this highly important physiological question remains undetermined, it is not surprising that our ideas of the pathology are at variance.

It is most natural that we should be inclined to accept the teachings of Mr. Tait, not because of his extensive research and unique experience, but because his theory is a step advancing to a solution of the perplexing question of etiology.

Thomas, in his usual systematic and precise manner, classifies the cause of ectopic gestation under two general heads, as immediate and remote.

After analyzing all the various assigned elements as factors in the causation of ectopic gestation it appears to me to resolve itself into any disease or condition, acting mechanically or otherwise, which impinges upon, distorts, disorders, or impedes the natural action of the Fallopian cilia, may cause ectopic gestation. This idea harmonizes beautifully with the Tait theory, which is "that, save in abnormal condition of the tubes, spermatozoa never penetrate further than the uterus."

PATHOLOGY.

Owing to inaccurate and careless observations, the pathology of ectopic gestation is most perplexing. Every observer attempting to classify his particular case according to the location of the placenta or foetus, consequently we are not surprised to find that Dezeimeris makes ten different varieties.

Parry greatly simplified matters under three grand divisions of tubal, ovarian, and abdominal. These various classifications are all made with an effort to define the peculiar condition, attachment, and anatomical surroundings of the foetal sac. Mr. Tait, in a most logical manner reasons from cause to effect, and "dismissing all previous classifications as inconsistent" with his views of the explanation of the cause of ectopic gestation, as well as the physiology of impregnation, concludes that in the process of catarrhal salpingitis there is a desquamation of the cilia lining the Fallopian tubes, the special and particular function of which is to waft the ovum along from the fimbriated extremity to the uterus. These cilia being destroyed, and the epithelium swollen, the canal of the tube is sufficiently occluded to arrest the large ovum, but into which the spermatozoa, by their own pow-

er *may* worm their way, reaching the ovum, impregnating it. "It follows as a matter of course, then, that all ectopic gestation must, in their origin, be tubal." He admits the mere possibility of fecundation of an ovum before it leaves its vesicle.

While it is not wise to pin our faith to the teachings of one man to the exclusion of all others, yet I am convinced of the practical fact that all misplaced conceptions are primarily tubal. If engrafted in that part of the tube passing through the uterine wall, it may be described as interstitial, yet tubal all the same. Near the infundibulum, some are pleased to style it tubo-ovarian.

An ovum becoming impregnated in the tube its growth is attended by certain changes and calamities with which we should all be familiar. The pathology varies according to the "direction and behavior of the pregnancy."

Familiar as we all are with the changes occurring in normal gestation, it is not difficult to comprehend the increased vascular supply, the venous turgescence, the hyperplastic growth resulting from the attachment of the fruit sac to the Fallopian wall, the development of a "boggy cystic vascular tumor" (Smith) associated with certain well-marked changes in the uterus itself, that organ becoming enlarged soft and its cavity lined by a decidual membrane. For a time nature makes every effort to provide board and lodging for the uninvited guest, but soon her hospitality is taxed beyond endurance and, as a natural consequence, at some time before the fourteenth week, a rupture invariably occurs. This rupture we call the primary rupture, and it may occur in one of two directions; either into the peritoneal cavity, or downwards between and into the folds of the broad ligament; the escaping matter is then entirely extra-peritoneal.

The point of rupture seems to be at the side of placental attachment, naturally the thickest, yet the weakest part of the tube. With the occurrence of the rupture the ovary may escape entire through the rent or only in part, leaving the placenta attached. That variety known to most writers as abdominal pregnancy consists of "clearly exceptional cases, where primary tubal rupture at the end of the third month has not proven fatal, and where the extruded placenta has made for itself a visceral attachment" thus, with contraction and healing of the tube, intra-peritoneal or abdominal gestation goes on to development as a secondary affair.

Now let us consider the second variety of rupture in which the effusion takes place in the folds of the broad ligament, or, in other words, about the twelfth week of the ectopic gestation rupture in the lower segment of the tube occurs and in consequence we have formed an extra-peritoneal hæmatoma. The subsequent behavior of the case is full of interest. If the placenta remains undetached the now broad ligament pregnancy may go on to full term or may at once die, and fruit sac and blood be absorbed, or suppurate and discharge through one of four channels, viz: rectum, vagina, bladder or umbilicus, or may remain quiet as a lithopedion, or lastly, may by secondary rupture become abdominal.

We have said that primary rupture into the peritoneal cavity is generally fatal, It may prove immediately so. Here seems an appropriate place to exhibit this specimen and briefly, report the case.

CASE I.

Lila Storrs, æt. 22, a public prostitute. Her last normal menstruation was Aug. 10, 1890, The first week in September she was unwell for one day. All during September and up to the date of my visit she suffered with dull colicky pelvic pains, especially on the right side. Some nausea and vomiting. October 5th while sitting over the commode she was seized with a severe hemorrhage, passing a quart or more of fluid blood and clots which unfortunately had been removed without examination. I found the uterus soft and somewhat enlarged and from its open os I removed a flake of membrane some two by three inches in dimension. I considered this to be a part of the foetal membranes, the remains of an abortion. Treating and directing the case in the usual way I thought no more of it.

October 17th, while shopping in one of our large dry goods stores, she was seized with a severe pain in her side, became deathly pale and fell in a faint. Restoratives were administered, when she revived sufficiently to be sent to my office, where she was attended by Drs. Winn and Wilson, they making every effort to restore her. I arrived some half an hour later, and finding her in a profound shock, I at once recalled the circumstances of two weeks before and connecting that with her condition of extreme collapse, diagnosed ruptured tubal pregnancy.

Drs. Cain and Stephens were hastily summoned to my assistance, but too late, she died in a few minutes.

A post-mortem was obtained. The abdomen was found filled of fluid blood, and this beautiful specimen of ruptured tubal pregnancy of about four weeks duration was secured.

CASE II.

As an illustration of those cases in which rupture occurs downward in the cavity of the broad ligament, life and development going on to full term, I will cite a case Dr. Altman was kind enough to present at my clinic.

Dr. Altman was called to attend his patient for some supposed digestive disorder. She was suffering with nausea, vomiting and intense colicky pains, she had fainted several times and was in a state of "profound shock." Considering it a "case of congestion" he so treated it. She had missed three menstrual periods and considered herself pregnant.

Six months later he was again called to her. She then presented the appearance and symptoms of a woman in labor at full term.

After some delay a diagnosis of extra-uterine pregnancy was made. The Doctor advised and urged immediate operation. Consultation was called, and in this he was overruled.

The case passed from under his care. A few weeks later, much to his surprise, he saw her on the street. Of late he has had several opportunities to examine the woman. She is still possessed of a large tumor, which has become gradually but decidedly smaller since the effort at delivery, now more than one year ago. Through the abdominal walls you can distinctly define the outlines of the fœtus.

Does not this case in all its details offer a beautiful clinical study? The nausea, vomiting, colicky pains, shock and syncope, at the third month of pregnancy, all indicated rupture. The escape was downward. By some *misfortune* the placenta was not entirely detached, fœtal life was preserved, gestation continued to full term when there was a decided effort at labor. Nature failing in this, and the Doctor being denied the privilege of operating, death of the child followed, from which time we note the gradual diminution in the tumor. While it may remain quiescent, we look for it to destroy the woman's life, or to ultimately be discharged through one of the avenues.

CASE III.

In Tait's scheme we are told that a broad ligament or extra-peritoneal gestation may by secondary rupture become abdominal, then of course death is quite likely to follow. It has been my misfortune to observe this variety of gestation.

Mary Hittner. November 6th last, I visited for the first time this patient and elicited the following history: Age twenty-two years, married six months, good family and personal history. About the 20th of last September she was menstruating naturally, and while the flow was in progress she sustained a severe fall, in consequence of which she suffered intense pain in her right side. The uterine hemorrhage was greatly increased and has continued at irregular intervals to the present time. About four weeks after the fall, she again suffered severe pain in her right side, with chill and high temperature following. She then discovered a small sausage shaped swelling in her right ovarian region. Her condition became alarming and I was called November 6th, six weeks after the fall. I found her pale and greatly prostrated. Abdomen tympanitic and quite tender, there was a small elastic and very sensitive swelling in her right inguinal region.

Pelvic examination showed the uterus soft, somewhat enlarged and displaced to the left by a large boggy swelling which entirely filled the right vaginal vault.

After consultation with Drs. Richardson and Cain, an exploratory section was determined upon. The history and symptoms of this case were so disconnected that a rational diagnosis could not be made. Yet wishing to have some opinion I stated to Drs. War-mouth and Wood that I expected to find ruptured tubal pregnancy. On opening the abdomen a sheet of clotted blood at least one inch in thickness lay just beneath the peritoneum over the intestines. The right tube was found to be ruptured, there was also found a large rent in the posterior fold of the broad ligament.

While we could not find any evidence of foetal remains yet I can only explain this case as one of tubal pregnancy with primary rupture into the broad ligament. Extensive hemorrhage and four weeks later secondary rupture from over distension and gradual escape of blood into the peritoneal cavity.

The symptoms and diagnosis of ectopic gestation are studied as suggested by Tait, Price and others, under three classes; 1st, symptoms before rupture; 2nd, at the time of rupture; and, 3rd, after rupture. Our highest authority tells us that no authentic description exists of an unruptured tubal pregnancy, yet some of us can tell of one or more cases whose symptoms before rupture were at least significant if not diagnostic. The symptoms before rupture are so concisely and accurately given by Price that I quote from him: "Partial or complete cessation of menstruation for one or more periods, generally accompanied by other rational symptoms of pregnancy, though occasionally these are all wanting. Secondly, Pain which is peculiar, being severe, paroxysmal and long continued; a sickening pelvic pain, which is neither cramp-like nor colicky, though it is often described by these terms. Thirdly, The appearance of uterine hemorrhage, which again is peculiar in that it is usually irregular both as to time and quantity, generally lighter in color than the normal discharge and containing shreds of tissue, which are portions of the decidua vera."

Let me again, gentlemen, refer you to the case of Lila S., which, in the most minute detail corresponds to the above description of symptoms prior to rupture, except the decidual membrane was cast off, not in shreds, but in a flake, which I, in my ignorance, considered the membranes of an abortion. These warnings are not usually given us. Literature now abounds with cases of ectopic gestation in the great majority of which the patients had no suspicion of pregnancy. The attention of the attending physician is not directed that way; indeed, Mr. Tait says in all his cases the patients have made no complaint till the alarming symptoms of rupture have set in.

Yet, with the accuracy of these symptoms, a physical examination should be made. We are then likely to find the condition of affairs about as follows:

The uterus is enlarged and soft as in normal pregnancy. It is generally displaced by a large tender cystic mass occupying the position of one tube. This mass is freely movable.

A differential diagnosis from normal pregnancy is exceedingly difficult, the mistake may be made of thinking a miscarriage has occurred; the flakes of membrane are misleading.

The local signs progressively increase as the pregnancy ad-

vances. When it reaches the period of rupture our diagnosis is generally clear enough.

The symptoms vary according to the seat of rupture whether escaping hemorrhage is into the peritoneal cavity or between the folds of the broad ligament.

At the time of rupture the patient is seized with agonizing pain and showing every symptom of hemorrhage, quickly passes into collapse. If the hemorrhage is not staunched death will close the scene in a few hours. This is the ordinary history of rupture into the peritoneal cavity.

Should the rupture occur downward into the folds of the broad ligament, the case presents the symptoms of pelvic hæmatocele, pain, shock, syncope, reaction, slight fever, and possibly a recurrence of hemorrhage, and with it a repetition of the symptoms. Should the patient react, and they generally do when the rupture is downward, the future of the case will depend upon the survival of the fœtus. If, after the primary rupture, gestation should continue, we must be mindful of the danger of a secondary rupture at any time.

Having already consumed too much of your valuable time, I will not enter into the discussion of the questions involved in the treatment of ectopic gestation; suffice it to say, a diagnosis having been made, either before, at the time of, or after rupture, our management of the case should be by abdominal section.

Many of the points here presented have been borrowed from the writings of Tait, Price, Townsend, Montgomery, Wathen, Zinke and others.

CLINICAL LECTURE BY THOS. MENEES, M. D.,

Professor of Obstetrics in the Medical Department of the University of
Nashville and of Vanderbilt University.

Stenographically reported by R. Stonestreet, Medical Student.

CASE OF BROW PRESENTATION IN A DEFORMED PELVIS.

I propose this morning, gentlemen, to interest and instruct you by reporting two cases which occurred quite recently in my practice. In the afternoon of December the 31st, 1890, I was called in consultation with Dr. Altman of this city, who assisted by Mr. Skiles of your class, had for some hours been in attendance upon a woman, a multipara, of about thirty-six years of age.

Upon examination I found a brow presentation—the membranes had ruptured as early as nine o'clock, in the forenoon, seven hours before I was called to the case. Dr. Altman had attempted to deliver with forceps, a very proper proceeding, but failed. I made a similar attempt, but like him I failed.

In brow cases, gentlemen, authorities will tell you that as a rule the faulty position will be spontaneously corrected either by extension into a face presentation or by flexion into a vertex. The rule failed in this case, however, the brow had been forced down into the cavity in advance of the chin and was firmly impacted and pressed down. The head was outside of the uterine cavity. Under the circumstances I tried to convert it into a face presentation, but failed.

I again attempted to deliver with the forceps but with no better success. An effort was then made to rotate and deliver by the use of the short straight forceps, but without success.

I should have prefaced these remarks by telling you that on making examination of the case at the outset, I had remarked to Dr. Altman "You have here a badly deformed pelvis," to which he

had answered "That is true, she has been delivered once before by craniotomy."

In a normal pelvis as you all know, gentlemen, the antero-posterior diameter at the brim is four and one half inches. When I say it was reduced in this case fully by one inch, I do not think I exaggerate. You can now understand why in this contracted pelvis I found it impossible to extend the head into a face presentation and also why we were so strongly driven to contemplate craniotomy, for I had announced to the gentlemen that craniotomy would be a necessity.

Just at this juncture a paper by Parry of Philadelphia, read before the Obstetrical society of Philadelphia in 1873 and published in the *American Journal of Obstetrics*, in 1875 upon "Manipulation with the Hands for the Purpose of Correcting False Presentations," occurred to me. He had urged that in face cases where rotation could not be effected and where craniotomy seemed inevitable, to put the patient profoundly under the influence of an anæsthetic and that the hand be introduced into the vagina and an effort made to push the whole head above the pelvic brim in order to secure room in which to flex the head. The mento-occipital diameter is five and a half inches, the antero-posterior cavity of the pelvis is four and seven-tenths inches according to Playfair, in a normal pelvis; but here we had lost at least an inch at the brim. That being true you can see that it would be a physical impossibility to flex a diameter of five and a half inches in a space of less than four inches. The only means by which flexion could be accomplished in this case would consist in pressing the head entirely back into the abdominal cavity and then by placing the hand on the occiput, the occiput might be brought down and the chin be made to sweep above the pelvic brim in this manner.

(Here the professor demonstrated the procedure on the manikin.)

Now as you all see by this manœuvre I have converted a brow case into an occipito-anterior—a favorable presentation.

The patient was so exhausted that there was not a pain after I first saw her. Had there been any uterine energy, Nature would have taken up the case at this step and accomplished delivery, but here we had a deformed pelvis and complete inertia of the uterus. I therefore applied Simpson's forceps and accomplished

delivery very cautiously and slowly. The patient had taken a drachm of Squibb's fl. ext. ergot.

The head having been brought down upon the perineum, the uterus remained inert. A large hypodermic of ergot was administered in order if possible to rally the uterus to our assistance. That done, I now proceeded to deliver. Still perfect inertia, no response to the ergot. I delivered the head, no uterine contraction to propel the trunk forward. After an interval of fifteen minutes I dared empty the uterus by delivering the foetus.

Still perfect and complete uterine inertia. The size of the uterus after delivery did not diminish much and was as limp as a dishrag and through the relaxed uterine walls the placenta could be plainly felt. I put my hand on the abdomen and found a relaxed uterus with the placenta lying in situ. After waiting a considerable time I concluded to use Crede's method to expel the placental mass, which was accomplished without difficulty.

But the uterus still remained inert, the pulse was very rapid and feeble, and here came the hemorrhage, as I expected, but as the ice I had ordered had not been brought I called for vinegar, intending to introduce into the womb a sponge saturated with it as a temporary check, but Dr. A., who was now watching the case, said the hemorrhage was rapidly increasing.

I knew the loss of much blood would be rapidly fatal to the patient, already greatly exhausted by the difficult labor, and knowing that we could not temporize, determined to rely upon thrombosis, and therefore, without delay, threw an injection of persulphate of iron into the uterine cavity. When I endeavored to introduce the nozzle of the syringe, I found the uterus so placed that it had fallen backward over the projecting promontory, throwing the os up under the symphysis, making it very difficult to reach, but I succeeded in reaching it and throwing the persulphate of iron well into the cavity. As is usual under such circumstances, the hemorrhage was arrested.

The patient being much exhausted, I suggested to Dr. A. to give her anodynes and stimulants. I have not seen the patient since, but my information is that there has not been an unfavorable symptom; in fact, the woman wanted to get up a few days after confinement.

I hope, gentlemen, that you may never have such a difficult

case, but if you should, I trust the experience I have detailed in this lecture may help you out of your trouble.

A CASE OF OCCIPITO-POSTERIOR POSITION.

I will give you another case—occipito-posterior position—head forced on the floor of the pelvis. It had come to the point at which it had received the reflected force of Solyor, and yet did not respond, and it was struggling for delivery occipito-posterior, and this in a primip. An effort had been made before my arrival, if I am correctly informed, to deliver with forceps; a very natural effort because it looked to me to be extreme. Having been informed of this effort, and that in the hands, too, of a distinguished and competent gentleman, it was agreed, in consultation, that we would first make an effort to flex with the vectis and rotate, and in case this should fail it was agreed that the next step would be to make an effort to rotate with the straight forceps, this failing, then to use the long forceps. Not having a vectis or the straight forceps present, I sent for my bag of instruments in order to get my vectis and straight forceps, and for another reason, viz: That I have recently got into the habit of using Simpson's forceps, and preferred in this difficult case to use the instruments I had been in the habit of using. While the messenger was gone your distinguished Professor of Institutes of Medicine, who had been in the case before but had been temporarily absent entered the room; and, in conference with him, whose opinion I have often sought with great interest, he agreed to the line of treatment proposed, and upon the arrival of my instruments, I set to work.

Here was a case with the occiput in the third position, struggling for delivery with the posterior fontanelle rotated back into the cavity of the sacrum, making a very unpromising case. But with this instrument (vectis) I endeavored to rotate, passing it just as you would one blade of the forceps, the outside anointed, the inside not; for you do not want it to slip. I passed it over the os occiput, then making a point of pressure upon my left hand (for you must be careful in the use of this instrument to protect the soft parts of the mother) I endeavored to bring down the occiput, to flex the head, bringing the chin down upon the sternum. I succeeded in flexing the head, and now manipulating with the instrument with the head flexed, I made the os occiput

pass under the right ischial spine so as not to interfere with its rotation forward, the os frontis above the ischial spine of the left side. Now, with further manipulations with my hand, I succeeded in accomplishing rotation. I then had an occipito-anterior position when I delivered without trouble, with forceps, living child, to the great delight of a deserving family.

PLAYFAIR ON LINGERING LABOR.

The author considers only those cases not attributable to mechanical obstruction, but simply due to uterine inertia. Dr. Flayfair said that, in his opinion, versed on his own experience and corroborated by the views entertained by the authorities of the leading maternity hospitals of Great Britain, the use of ergot prior to the expulsion of the placenta was practically obsolete. He relies more upon position and pressure over the abdomen. He considers chloral hydrate the most valuable drug to be used up to the time the head presses upon the perineum, when he uses chloroform.—*Brit. Med. Journal.*

MORE STUDENTS AND FEWER TRAMPS.

BY A. B. TADLOCK, M. A., M. D.*Knoxville, Tenn.*

"A graduated doctor of a two year's course should not prescribe for a sick cat of mine," said a young licentiate just out of a Canadian Medical College, unceremoniously interrupting a conversation at the breakfast table between two doctors, one of whom was a practitioner of fifty-five years of age, and to whom the neophyte, just training his first crop of mustache, had not yet been introduced. An expression from the senior physician, dissenting from a strict rule of a four or six year's requirement for graduation governing a State board of medical examiners furnished the gentleman the accepted opportunity for the sapient remark before breaking his fast.

A real live medical "autocrat at the breakfast table" unceremoniously dished up, and so *rare*, so unexpected—not on the bill of fare—pondered the guests. Sarcasm? Ignorance? Egotism puerile? Want of manners? Impertinence? Who is he, anyhow, and where from? the doctors queried mentally while scanning for a moment the esthetic necktie and beardless physiognomy of the gentleman in question for an answer? But no response was elicited in this way, nor did suppressed silence seem to furnish the (now apparent) Spring paroquet any hint of his mistaken privilege or to check his ardent determination to introduce himself and air his preconceived importance. In his first utterance had he not indicated a sad want of paternal training in manners? It was soon still more apparent that he had missed the kindergarten entirely and commenced at the wrong end of his education. It would not be worth mentioning if this were a single instance instead of an indication of a feeling too prevalent that more "terming" with

even less training, should command the only rightfully endorsed proficiency of an applicant. An English physician, located in Naples, said to the writer that "a medical student learns more in America in two years than one does in Naples in the six years required course." We appreciated this remark, and think besides that the geographical range of the indictment should not be limited to the "medical center" of the Bay City of the world. For, the extra terming—even with less training (save the mark)—begets the kindred feeling of superiority no less in Great Britain, Germany and France. It is this arrogant demonstration of an arbitrary feeling of superiority which may be false or it may be true, as the inference is not, by any means, infallible, and not the effort to raise the standard of medical learning that is to be regretted and should be discouraged by teachers, for that which makes the boy and his preceptor's teaching appear ridiculous, as a rule, ripens into unbearable bigotry in the man, blurring more or less the pride of his alma mater. Certainly the medical college that would graduate a boy in a term less than that of ten years who had had no kindergarten training, nor sufficient rudimentary instruction should be impeached and blacklisted. But what does all this twaddle about courses mean, anyhow? Are medical colleges nothing but kinds of medical table d'hotes to be judged, like noted hostelryes, by the number of courses served at a meal without reference to quality, process of administration, or the capacities and the receptivity of the guest?

We believe that every practitioner of medicine should have a diploma necessarily representing his true grade of qualifications; otherwise a board had better pass it over, even though representing a six year course, and license the competent man with but two, even minus any diploma whatever.

Every competent teacher fully appreciates the advantages a thorough collegiate education gives a student in the lecture room. And, other things being equal, there can be no question that the graduate of our best literary institutions, studying medicine three years, and having two full courses of lectures, would be equal in qualification to the man who, with barely a primary schooling, would attend perhaps three courses of lectures inside of two years. Medical colleges by matriculating students without the education necessary to successfully study medicine, and by diplomating them

by courses instead of for merit, may increase their roll-call, may perchance, add a little to their finances, and even give "cats" a better showing, but I doubt, with all the additional modern facilities for study, if very many greater or more worthy examples will be furnished the profession than some of the illustrious practitioners and professors of our age and time who ventured forth in life with the awfully meagre complement of only two courses.

A three story house on an insufficient foundation is not as desirable as a two story house on a firm and reliable basement. A meal of one course of bacon and beans, bread and meat, the *staff of life*, well served up, is better nutriment for growth and strength (and this is what we want) than a dozen courses of fancy relishes. At last gumption and grit are the basic elements, the pepper and salt, or lime and mortar, without which the result will be more or less unsatisfactory, whether doctor, dinner or house-building be the aim.

The standard of medical education is to-day ahead of any other profession. What we want is the rank and file brought up in line, bringing to the front some of the lost art of ethics, revived, albeit in the nineteenth century, in our lecture rooms. I deny that so-called "additional courses" are doing this. I rather believe, with our expensive methods, the tendency is to discourage and perhaps turn away some of our best material. Thirty dollars per year, in Naples, pays all the tuition and hospital fees of a medical student, including, I believe, a lodging room, and twice that amount will feed and cloth him. Cheapen our systems thus, and "courses" may be added with greater impunity.

Am I opposed to making our "system of medical instruction the best possible in our country?" God forbid. I plead for our young men who have grip and grit, pluck and merit. I would have these priceless virtues bearing fruits of rich preparatory training and education; though hampered financially, have a chance along with banked capital and other weighty influences.

Having occupied the position of office instructor to several young men whom I ever encouraged in their ambition to excel and attain the highest rank in the profession, as also an ex-teacher in a worthy medical college, I have naturally the highest respect and regard for these institutions. Nor would I offer an objection to all the additional courses by which they, or any one of them,

may think necessary to secure the "best possible" efficiency to the profession. Let us have more *students* in the profession, with or without diplomas, if you please, but always *students*, and fewer tramps with diplomas (of many *finished courses*) in gilded frames hung in offices along-side of displays of instruments which, if not emblematic always of medical tramps, certainly have the ocular significance of ethical elasticity. Finished diplomas may make "Doc" and "Drs." but never physicians. Perhaps it might be better to have national boards of medical examiners, after the manner of many other countries, whose duty would be to pass upon the applicant's qualification without regard to colleges or courses. In this case the most important consideration would be to have competent and proper men on these boards to estimate and credit practical medical knowledge rather than base judgment upon the answers to catch questions in technology and theoretical problems. Without attempting to discuss this subject here, I will only add an example in illustration. Among the lists of questions of a certain state board at a meeting, a few months ago, was "What is the histology of a tubercle?" A lecturer on pathological anatomy and more courses, who had never prescribed for a patient might answer this (?) correctly and yet fail to satisfactorily give the objective and subjective symptoms of tuberculosis; might prescribe for the feline family more in accordance with the views of our Canadian confrere.

SURGICAL CLINIC OF CHARLES S. BRIGGS, M. D.,
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Reported by W. M. Brazelton, Medical Student.

INGROWING TOE-NAIL—AVULSION.

This patient, Isaac G., æt. 16, appears before you for relief of the very painful affection of the great toe known as ingrowing nail. The affection is due to a faulty growth of the nail superinduced by pressure, neglect or a wrong way of trimming the nail. The condition is most frequently met with on the outer side of the toe. In the early period of the affection but little more than slight tenderness due to a mild degree of inflammation is experienced caused by pressure of the sharp edge of the nail upon the tissues. After awhile the continued pressure causes a higher degree of inflammation and eventually ulceration attended by a peculiarly fetid, thin discharge of sero-purulent fluid. At times the affection gives rise to so much suffering as to practically disable the patient from business. It may with truth be said that no affection as trivial in its pathological nature gives rise to so much pain. Observe the toe as it is now exposed to you. The member is considerably larger than its fellow. On the inner side the nail is buried in a mass of flesh, the result of long continued inflammation. When the overgrowing flesh is lifted as far as possible off the nail an ulcerated space extending the length of the nail is brought into view. The parts are moist with the peculiar fetid discharge. The most careful manipulation gives rise to pain.

The treatment is palliative or radical. In mild cases attention should be given to the shoes, advising that the patient wear such as are broad and roomy across the toes. Special care should be

given to paring the nail, the free extremity should be cut square, not convex as is usually done. Exuberant granulations should be repressed by frequent applications of nitrate of silver. In order to lessen pressure it is a good plan to scrape the nail daily over its convexity from root to free extremity with a knife or the edge of a piece of broken glass. To protect the tissues from the sharp edge of the nail, small pledgets of cotton should be carefully introduced between the inverted edge of the nail and the flesh. By such careful watchfulness and nursing, the condition may be relieved. When, however, the disease has reached such an extreme degree as in the patient now before you, no such mild means will suffice—an attempt at radical cure must be made.

The operation for radical cure is termed avulsion of the toe-nail, and consists of the removal of that half of the nail which is involved in the diseased process and the removal of the overgrowing mass of flesh. I shall proceed as follows: A four per cent. solution of cocaine is injected at several points, first on the inner border of the toe, then under the nail and, lastly, into the tissues over the root of the nail, about twenty minims in all being used. To prevent hemorrhage and to confine the effects of the cocaine to the part operated upon a rubber band is passed around the base of the toe and tied. The overgrowing flesh is now transfixed near its base by a sharp scalpel and the knife carried forward and brought out at the end of the toe. The flap thus raised is removed entirely. The knife is then carried underneath the segment of the nail to be removed and its connections freely divided, a pair of scissors are used to divide the nail from the free edge to the root, and the loosened nail being seized with a pair of dressing forceps is twisted out. To prevent reformation of the nail, the part of the matrix which is exposed may be scraped away. This is not, however, necessary as the cure is nearly always assured by the contraction of the cicatrix on the side of the toe from which the segment of flesh is removed. The dressing, which consists of a compress of sublimated gauze, and over that a layer of cotton, confined by a moderately tight bandage is applied before the rubber band is removed, so that there is hardly a drop of blood lost.

(The operation was performed as described. Complete local anæsthesia was secured.)

EPITHELIOMA OF THE NECK—APPLICATION OF MICHEL'S PASTE.

This patient, Mr. W., æt. 56, a resident of Clarksville, Tenn., has come before you for treatment of an epithelial ulcer situated on the left side of the neck, a little below and on a line posterior to the ear. You will observe at this point an oval-shaped ulcer, placed directly over the sterno-mastoid muscle. The ulcer is about a quarter of an inch deep, its edges are abrupt, and at several points undermined. Its base is irregular and covered with ill-conditioned granulations. The outlines of the ulcer are regular and its shape oval placed obliquely to the axis of the neck. Its dimensions are an inch in its long, by half an inch in its short diameter. The secretion of the ulcer is scanty, thin and semi-purulent. The tissues immediately adjacent to the ulcer are markedly indurated to the extent of half an inch or more all around. The part is not very painful to the touch, but the patient says that at times he suffers considerable pain. Little inflammation is present. The glands in the neighborhood are not enlarged. There is some stiffness of the neck present, due to infiltration of the fibres of the sterno-mastoid muscle. The patient's health is good and he is exceedingly anxious to have something done for his relief. The trouble is undoubtedly malignant in character and the ulcer may be correctly termed an epitheliomatous ulcer. The history of the case is as follows:

For a number of years he had noticed the gradual growth on the side of his neck of what appeared to be simply a warty excrescence. On the surface of the growth, scabs would form which would fall off and leave a rather raw discharging surface only slightly elevated above the surface. This in course of time increased in size until it reached the dimensions of an almond at which time it was considerably raised above the surface, and was frequently the source of troublesome hemorrhage. He suffered, however, with but little pain or inconvenience aside from its unsightliness. Two years since he came to me for treatment, and I pronounced it an epithelial tumor,—the so-called skin cancer, and advised its removal. I removed it by a free excision, and the wound healed up without accident. Several months since, the external extremity of the cicatrix became inflamed, broke down and commenced discharging purulent fluid. The tissues

around became indurated for some distance and an ulcer gradually increased in size until it reached the dimensions it now exhibits. The tissues for some distance around and to a considerable depth are infiltrated with the cancerous elements to such an extent as to preclude the idea of removal by the knife. Consequently it is proposed to attempt its removal by the application of a powerful caustic, which has been successfully used a great many times for the removal of similar infiltrations. I shall, this morning, accordingly apply to the part Michel's paste, which is composed of Nordhausen's sulphuric acid 3 parts, asbestos 1 part, rubbed together into a thick paste, having previously injected morphine for its systemic effect and cocaine, four per cent. solution, for its local effect. The ulcer is filled with the paste, and the margins immediately around the ulcer covered to the extent of half an inch. The strength of the preparation may be estimated by the fact that several layers of gauze placed over the paste are rapidly destroyed. The patient complains of much pain from the application. The patient is put to bed lying on his side so as to have the affected part placed level, and an attendant is made to sit at his bedside constantly with orders to prevent the fluids which rapidly collect upon the surface from running over the adjacent parts. The sound integument is further protected by a coating of collodion. Eight hours after the application the paste will be removed and a poultice applied.

The slough will come away in the course of forty-eight hours, and an ulcer of wider extent than the area of paste application will result, which we trust will be entirely free from malignant properties and will heal promptly.

(The patient bore the pain of the caustic heroically. The tissue destruction was considerable, the fibres of the sterno-mastoid having been entirely corroded away. After separation of the slough, which occurred in forty-eight hours, the large ulcer appeared perfectly healthy. All the induration which had previously existed disappeared and cicatrization, hastened by skin grafting at a number of points, proceeded rapidly until the ulcer became smaller than it was originally, and is now rapidly progressing toward recovery. The indications are that the result will be eminently successful.)

CYSTIC TUMOR OF THE SUB-MAXILLARY REGION.

This young lady, Miss B., has been brought to us from Goodlettsville, Tenn., by her physician, Dr. Joyner, for removal of a growth situated beneath the jaw on the left side of the neck. The tumor is about the size of a walnut, movable under the skin, regular in its globular outline and smooth over the surface. It is hard and elastic, and yields an obscure sense of fluctuation. Its existence was first noticed by the patient nearly two years ago, when it appeared as a small painless swelling not larger than a filbert, since which time it has been slowly growing until it attained the dimensions you now see. At no time has it caused pain, nor is it now tender upon pressure. It causes considerable disfigurement, and for that purpose mainly the young lady wishes to have it removed.

Growths in this region of the body are most usually glandular in character, but the general features of this tumor point to its cystic character. The slow painless growth of the neoplasm proclaims its innocent character. The deeper attachments of the growth are tolerably close, and its position in the neck will demand a careful dissection to avoid important structures, which in this part of the neck are numerous and close together. The operation for the removal of the growth will be done as follows:

The patient having been etherized, and the parts rendered aseptic, an incision of about four inches in length will be placed over the tumor parallel with the body of the jaw. The integument and platysma muscle having been divided to the full length of the incision, and the surface of the tumor exposed, the knife is laid aside and the cyst enucleated from its bed with the fingers and forceps. The wound will be dressed with the ordinary attention to antiseptic details, special care being taken to effect thorough drainage of the cavity.

(The operation was done as indicated. The cyst was enucleated entire. Very little hemorrhage occurred, only one ligature being required. The contents of the sub-maxillary triangle were nicely exposed by the dissection. The wound was closed by six antiseptic catgut sutures, and a drainage tube brought out through the lower angle of the wound. The position of the cicatrix under the border of the jaw prevented disfigurement. The subsequent progress of the case was perfectly satisfactory.)

GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF
BALTIMORE, Md.—December Meeting.

REPORTED BY WM. S. GARDNER, M.D., SECRETARY.

Vice-President, Dr. Chas. H. Riley in the chair.

Mrs. Maggie G., a light colored woman, about thirty years of age, twice married, had had two children by her first husband. Had suffered much during the past twelve years from dysmenorrhœa; had been unable to do ordinary work.

Examination showed the uterus to be retroflexed and firmly bound down, but the character of the adhesion could not be definitely made out. There was an irregularly shaped elastic mass in the position of each tube diagnosticated as cystic ovaries together with chronically inflamed tubes.

All the pelvic tissues were very sensitive to pressure. There was a deep, double laceration of the cervix, and lacerated perineum with very lax vaginal walls but only slight rectocele.

When the abdomen was opened the mass on each side was found to be composed of a cystic ovary and the corresponding tube firmly matted together by old organized adhesions, each mass being firmly bound down to the pelvic wall by strong and recent adhesions. There were also adhesions to the omentum. The left ovary ruptured before it could be removed. The mass in the right side appeared to be a large hematosalpinx but examination proved it to be an ovarian cyst into which blood had entered from a ruptured Graafian follicle. The adhesions behind the uterus were very broad, strong bands, and were pulled off the uterine walls.

All possible care was used to secure the patient against hemorrhage and the abdomen was douched out with hot boiled water until the return flow was practically colorless. A perforated glass drainage tube was inserted to the bottom of the cul-de-sac, and

the incision closed about it. The extreme difficulty of separating the adhesions and the douching prolonged the operation to about one and a half hours.

Although stimulants and artificial heat were pushed no reaction could be obtained, the temperature never reaching 95 degrees and the patient died about six hours after the operation, apparently from shock.

At no time was there any discharge of blood or even bloody fluid from the drainage tube.

Dr. N. G. Keirle however kindly examined the pelvic cavity post-mortem and reported that death was due to hemorrhage, the exact source of which could not be made out.

Dr. Thos. Opie exhibited a placenta that he had gotten a few hours before the meeting from a case of placenta previa.

The patient was 35 years of age, and had borne one child previously. When he first saw her she was blanched and exsanguined. The blood flow began three days before with a loss of a quart, and continued with more or less rapidity up to the time of operation. Her confinement was not expected for two weeks. When first seen by him there were some rhythmical pains and some dilatation.

The cervix was dilated with the fingers and cone of the hand; the placenta was detached with a sweep of the fore-finger around the cervix, the bag of waters was artificially ruptured and traction-rod forceps applied, The child was delivered in fifteen minutes without further loss of blood; the placenta coming away simultaneously with the birth of the child. Though the position was occipito-posterior, there was no laceration of the perineum and the child was unscathed. Both mother and child were left doing well.

Dr. Opie also exhibited a specimen of an ovarian tumor which he had recently removed. The tumor had developed into the epigastric region and the abdomen was about as large as it would have been at full term of pregnancy. It took two hours to break up the adhesions which were very dense between the tumor and intestines and between the tumor and the omentum.

The second tumor was taken from the pelvis. It was ovoidal in form, about seven inches in length, by five inches high and four inches thick. It was removed entire and upon section it was

found to be a dermoid growth. There was no history of peritonitis to account for the extensive adhesions. The patient had never had a day's discomfort, other than from the size of the cyst. She did not know until four months ago that she had a tumor. The material in the large cyst was colloid. Notwithstanding the extensive adhesions, the length of time consumed in breaking them up, and the injury resulting from the operation, the patient has made a good recovery, this being the seventeenth day after the operation.

Dr. Howard A. Kelly. The term colloid is often used in two senses. An incorrect use, describing the yellowish, more or less opalescent, thick, viscid material often found in ovarian cysts; it is employed in such cases as more or less synonymous with gluey. The other use of the term is to describe a mere condition in which the contents of the cyst are more or less like calf's foot jelly and have a vitreous fracture, they are with difficulty removed, clinging to every thing. This latter is true colloid, and when found such tumors are of a suspiciously malignant character. We should limit the use of the word to the latter condition.

I wish to refer to two minor matters of interest suggested by this specimen of placenta previa. The position which the placenta has occupied in the uterus can accurately be obtained by the position of the opening in the membranes made by the passage of the child, inasmuch as the fundus uteri must of necessity be just opposite to this perforation. We can therefore by reconstructing the membranes, see just in what part of the uterus the placenta lay. In one of my placenta previa cases there was no hole at all in the membranes as I had extracted the dead child through a perforation in the placenta. We can do still more than this in the way of a diagnosis with the membranes. By allowing them to be expelled untouched into the bed and carefully observing their exact position, we can tell on which side of the uterus the placenta was attached.

The second point is that we may have placenta previa hemorrhage without being able to detect a placental margin, owing to a low attachment of the part of the placenta, near the internal os, below the contraction ring but not over the whole of the cervical canal. The lower part of a placenta thus attached is separated by the opening up of the lower uterine segment.

Dr. L. E. Neal said: Although Dr. Kelly had alluded to a point of some interest, it is of far more practical importance to recognize placenta previa prior to its expulsion, and as far as he knew this could only be done with certainty by digital examination. Partial placental separation and rupture of the membranes during labor in cases of placenta previa was outlined by Mauriceau as early as 1668, but was fully described by Puyos in 1759. He saw nothing in the history of the present case as related by Dr. Opie that contradicted the method of Braxton Hicks, a method that up to the present time had given by far the best results, viz: $4\frac{1}{2}$ per cent. maternal mortality. If this method when practical could be performed earlier than by delivery by any other method, and was not difficult and gave the best results, why not have applied it in the present case?

Dr. Wilmer Brinton asked why Dr. Opie objected to the tampon in cases of placenta previa. He thought no arbitrary law could be applied.

Dr. Opie said in closing the discussion that results of operative procedure depended largely upon the skill and familiarity of the operator with the special operation resorted to; in his first case of placenta previa he had attended he had turned and lost both mother and child; with rapid dilatation and forceps he feels that he has command of the situation, and having resorted to that method repeatedly, had gained greater skill and does better work. While Dr. Neale might do better by some other method, he is fully satisfied that he does best himself with the forceps; he is opposed to the use of the tampon because it conceals what is going on; it is not best to wait for pains; he is in favor of rapid dilatation and delivery in placenta previa, in puerperal eclampsia and in abortion; to put in a tampon and go away is hazardous; the tampon is of very little help in hemorrhage.

Dr. Kelly read a paper upon "The Examination of the Normal Pelvic Viscera;" describing various bimanual and trimanual methods of palpating the normal ovary.

Dr. Wm. P. Chumod. When speaking of what should be found or can be found at an examination it is necessary to consider the circumstances under which the examination is made. Office examinations are the most usual and all the facilities are not usually at our command and this circumstance should be

specified and taken into account. Certain advantages in methods give certain advantages in results. Of course where the woman has no ovaries or where the ovaries are not in the pelvic cavity they cannot be palpated.

Dr. Hunter Robb: I thoroughly agree with Dr. Kelly that the normal ovary can always be palpated under an anæsthetic, and also that in a large number of patients the ovary can be outlined without anæsthesia. Four years ago Dr. Kelly taught me the method of examining the ovary by invaginating the perineum and I can testify to its utility. This lengthens out the examiner's finger and thus enables the practitioner who has a short finger to accomplish it with almost the same facility as a longer one. The corrugated tenaculum devised by Dr. Kelly may be used to advantage with nulliparous patient to define the uterus and its appendages still further. No one of course would think of using it in inflammatory conditions of the pelvic cavity.

Dr. B. B. Browne said that he had listened with much pleasure to Dr. Kelly's paper, and congratulated him upon the admirable manner in which he had systematized these valuable methods of pelvic examination—methods which most of us had been using in our gynecological practice for several years. He generally preferred the use of two fingers in the vagina as he could then make a more satisfactory examination of the tubes and ovaries than with one finger. In many cases a more accurate idea of the adhesions can be had by getting the finger above the ovary and fixing it between the finger and the spinal column. Pulling down the uterus aids diagnosis very much.

Dr. Opie said that there were few objections to Dr. Kelly's paper, but it seems that the elbow on the hip is incompatible with delicacy of touch, the law as expressed by Martin being: "The more lightly the parts are touched the easier the goal is reached, and the less the force that is employed the more distinctly things are felt." He thinks it is a cruel sort of thing to drag an organ out of its position, and would like to know how much displacement can be made with the tenaculum without producing dangerous trouble, for example, cellulitis, metritis and injuries to the peri-uterine tissues. He had met a number of cases in which he had not been able to make out the ovaries. Dr. A. Martin says

he can palpate normal tubes, but Dr. Opie has never been able to reach that degree of perfection.

Dr. Neale referred to the possibility of tracing out the ureters through the anterior vaginal wall as had been demonstrated to him by Dr. Kelly at the Hopkins Hospital Clinic. He had no doubt that in a large majority of cases the normal ovary could be displaced out of its normal position and palpated or touched with ease through the vaginal walls. He believed that a great deal of difficulty in an ordinary gynecological examination was due to the fact of neglecting to empty the bladder or to empty the rectal pouch.

Dr. H. P. C. Wilson said there were a large number of women in whom he was sure he could not palpate the ovaries, and he was doubtful if any one could do so. The uterus is often found fixed in the pelvis as in a mass of putty and no definite outlines can be made out. In other cases the abdominal walls are from two to four inches thick with fat, and in such cases he had failed to feel the ovaries.

Dr. J. Whitridge Williams said that he could certainly tell the ovaries in four cases out of five, and that he had succeeded occasionally in finding the ureter.

Dr. Morley. The old teaching is that the ovaries cannot be palpated in their normal position. When an ovary can be found by an ordinary examination its location may fairly be considered as abnormal. If Dr. Kelly's idea, that all men who cannot make out normal ovaries, should be thrown out of the specialty should be enforced a large number of experienced and thoroughly informed specialists would be excluded from practice. It is practically impossible to examine every patient thoroughly enough to make out the normal ovaries in office examinations. In dispensary and more especially in hospital practice the case is very different.

Dr. Browne thinks that the cases in which the ovaries cannot be felt are the abnormal cases; if the symptoms point to an examination of the ovaries they can be made out, but if necessary an anæsthetic should be given.

Dr. Kelly in closing the discussion said that he examines every case coming to him from vulva to ovaries, making a special note of every important organ.

When the patient complains of persistent pelvic pain the ex-

amination is never considered complete or the diagnosis over without a special note as to the condition of the ovaries. I have been asked about examining the ureter by palpation. They can be felt in almost all cases, being distinctly traced from the anterior part of the pelvis back to the side of the uterus. Pressing upon a diseased ureter causes a desire to pass water, often irresistible. I proved that this structure is a ureter by catheterizing it. The catheter can be felt through the vaginal wall outside the bladder, in the ureter, and the urine collected as it comes down from the kidney drop by drop. The Fallopian tube can often but not always be made out.

The amount of displacement of the uterus which can be made without injury is considerable. In normal cases it can easily and without harm or pain be brought down to the vaginal outlet. When there is fixation, gentle traction can be made until pain is felt. In these cases I use traction with the corrugated tenaculum and then pushing up the fundus with the finger, practice massage stretching the adhesion. I am sure that the downward traction to the vulva without pain never does harm.

Dr. J. Whitridge Williams' remarks upon the pathological experiments submitted to him by Dr. Mosely, Dr. Wilson and Dr. Opie.

The specimens submitted by Dr. Mosely are of considerable interest, and consist of the uterine appendages from both sides. The specimen from the left side consists of the Fallopian tube, ovary and part of the broad ligament. The tube was completely occluded at its fimbriated end but otherwise presented nothing abnormal, except numerous small adhesions. It contained a very small amount of dirty yellow fluid, consisting of columnar, ciliated epithelial cells and numerous disintegrated cells. The ovary was considerably torn and covered by very dense adhesions, while the broad ligament presented nothing of note. The specimen from the right side was an irregular mass of tissue, about $5 \times 4 \times 1\frac{1}{2}$ Cm., consisting of the tube and ovary imbedded in dense adhesions. At first glance the mass appeared to be composed of two parts, a large solid anterior portion covered by dense adhesions, and posterior to it a cystic structure about $4 \times 1\frac{1}{2}$ Cm. in size. This had a blueish color, thin wall and was intimately connected with the rest of the mass. Imbedded in adhesions a

piece of the ampullar end of the tube may be found, which could be traced for about 4 Cm. and then lost itself in the mass and appeared to have no connection with the above-mentioned cystic portion. The main portions of the mass on section was shown to be composed of ovarian tissue, which was covered and completely hidden from view by very dense adhesions and contained two tolerably fresh corpora lutea about $1\frac{1}{4}$ Cm. in diameter. The larger of these corpora lutea communicated by a small opening with the cystic portion above mentioned, which contained a thin reddish watery fluid containing blood cells. On cutting open this cystic portion its walls were found perfectly smooth with several smaller cysts projecting into it. These varied in size up to 2 Cm. in diameter and were filled with a clear watery fluid and arose directly from the ovarian tissue. On examining the scrapings from the walls of these cysts I found that they were lined by a layer of almost flat cutoidal cells which were distinctly ciliated. These cysts could not have originated in the tear as was readily demonstrated by their arrangement in relation to the larger cyst, and by the lining epithelium which was totally different from that of the tube. Their smooth interior precluded the idea of a ciliated papillary cystoma, and the only probable thing for them to be were dropsical Graafian follicles, which had been prevented from rupturing by the dense adhesions covering them, and so attained their large size. The fact that they were lined by ciliated epithelium is not at all opposed to the supposition, for cilia have previously been found in the dropsical Graafian follicle, as was shown by Van Velits of Buda-Pesth about a year ago and as I found altogether independently of him, last spring. But as yet I had not made a sufficient number of observations to assert that all dropsical follicles are lined by ciliated epithelium. The blood in the large cyst in all probability came from the corpus luteum with which it was connected. The adhesions about the ovary were particularly dense and resisting. The diagnosis from the specimen is pelvic peritonitis, with adhesions binding down the adnexa on both sides, particularly the right side, with several very large dropsical Graafian follicles.

The specimen submitted to me by Dr. H. P. C. Wilson was a small myoma, about 3 Cm. in diameter, and bore on one surface a piece of vaginal mucous membrane the size of a two cent piece.

The tumor was submitted to me to decide whether its origin was from the anterior fornix or from the uterus itself. Sections made through the tumor and the vaginal mucous membrane readily showed it to be a myoma, which was separated from the sub-mucous tissue and epithelium by numerous bands of non-striated muscular tissue. From the presence of muscular fibres between the tumor and epithelium, I think we are justified in concluding that it was not of vaginal origin. Were it of vaginal origin it should arise from the sub-mucous tissue and be immediately adjacent to the epithelium and not separated from it, as it was in this case by muscular tissues. Force is lent to this conclusion by the fact that vaginal fibroids are very rare indeed, and many of the reported cases, especially fibroids from the anterior fornix had their origin in the anterior wall of the uterus instead of the vagina.

The specimen submitted by Dr. Opie was a greatly hypertrophied posterior lip of the cervix, which measured 5 Cm. in length and 2 Cm. at its broadest part. Microscopically it was found to consist of almost normal cervical tissue, with only a very slight increase of the connective tissue. Except at its cut surface the entire mass was covered with the usual stratified epithelium.

Generally speaking we may distinguish two forms of hypertrophy of the frontis-vaginalis—follicular and diffuse or simple hypertrophy. The first form is due to an increase in number and size of the cervical glands, with frequent retention of their contents, and is quite frequent but never attains a very great size and is readily distinguished by its nodular appearance. The diffuse or simple form of hypertrophy is far more important. In this there is a general increase in all the elements that compose the cervix, though there may be a slight increase in the amount of connective tissue, as there was in this case.

Dr. Howard A. Kelly read a paper upon the Palpation of the Normal Uterine Appendages, (published in full in the February number of the American Journal of Obstetrics). He stated that the normal uterine appendages could always be palpated. There are two avenues of approach, by the vagina and by the rectum, and three ways of utilizing these avenues; 1st, with one hand; 2nd, with two hands employed bimanually, either by vagina and

or rectum, and 3rd, the trimanual method, by vagina and by rectum.

First, the examination with one hand is unsatisfactory and the ovary cannot even be felt unless abnormally displaced downward into the recto-uterine pouch.

Second, the success of the bimanual examination depends upon the downward pressure with the external hand displacing the abdominal walls in the direction of the ovary to be palpated, and thus affording a resistant plane against which the ovary can be felt by the internal hand. The internal hand must be used to invaginate the perineum, which is thus displaced upward into the pelvis. This invagination gives the examining finger, even though it be a short one, the necessary length. One, often even two inches, are thus gained to the palpating finger. Care must be taken in making the pressure necessary to produce this invagination, not to stiffen all the muscles of the forearm, thus impairing the tactile sense.

The rectum is, of all others, the best avenue for approaching the structures lateral to the uterus, affording as it does a wide open channel throughout the whole length of the pelvis.

Where the structures cannot be reached at once through the rectum, they are brought within easy touch by bringing the uterus and ovaries into an artificial retroposed anteflexion, the mechanism of which was carefully described by diagrams.

Dr. Kelly had, in this way, palpated fibroid tumors on the posterior surface of the uterus near the fundus, not as large as a pea.

Third, the trimanual examination is conducted either by the vagina or by the rectum and vagina, assisted with the hand above.

The peculiarity of this method is an artificial descensus uteri. The uterus is grasped with a pair of bullet forceps and drawn downwards until the cervix is seen at the vaginal outlet, and while an assistant holds it in this position, the gynecologist uses his hands bimanually.

To obviate the employment of an assistant, Dr. Kelly has invented an instrument, which he calls the corrugated tenaculum, flattened and roughened so that it can be readily held between the last phalanges of the third and fourth fingers and the ball of the thumb, while the index finger of the same hand, as-

sisted by the abdominal hand above is engaged in making a vaginal or rectal examination.

By one or the other of these methods, the uterus, the broad ligaments, and ovaries and tubes are within reach of a most thorough and searching examination, revealing at once the smallest abnormalities.

PARTIAL RESECTION OF THE DISEASED OVARY AND TUBE.

Dr. Martin, of Berlin, has systematically practised the partial removal of ovaries not entirely diseased. In some cases he has also resected part of the tube, and made, by suture of the mucous to the serous coat, a new ostium. This proceeding has been termed "salpingostomy," and has also been advocated by Wallace and Schroder. Dr. Martin came to the following conclusions: Patients recover perfectly after partial removal of the ovaries for localized chronic inflammatory changes, hydrops folliculi, and oophoritis. Recovery is also complete, in most cases, after the resection of obstructed and otherwise diseased tubes. The after-histories of seventeen patients operated upon by Dr. Martin prove that women with resected ovaries and tubes are not more exposed than other women to further disease of the parts left behind. Menstruation continued in all the cases, and some conceived. Dr. Martin notes that in 1864 Sir Spencer Wells emptied some dropical follicles in one ovary of a young girl, having just removed its fellow. The girl afterwards married, and had children. The first resection of the ovary, performed intentionally, was undertaken by Schroder in 1884. A dermoid cyst occupied part of an ovary (the fellow in this case also formed a tumor and was removed), it was cut out and the wound in the ovary was sewn up. The patient appears to have conceived after the publication of Schroder's own report of her case.—*Brit. Med. Jour.*

Selected Articles.

SOME NOTES BEARING ON THE ADMINISTRATION OF IRON.

BY JOHN AULDE, M.D., PHILADELPHIA, PA.

Although iron is highly esteemed as a medicament, and is largely used for its tonic effect upon the system, so frequently does it occur that the patient objects, owing to some idiosyncrasy or fancy, that we cannot regard it wholly as an ideal hæmatinic. No apology, therefore, is required in offering to the profession a comparatively recent preparation, which is free from some of the objections that have been urged against many of the iron preparations now in use. In order to make the reasons which I have to offer clear and distinct to the casual reader, I have deemed it wise to consider briefly some points intimately connected with the pharmacology of the drug. From this preliminary study we shall be in a measure prepared to estimate how nearly the new product comes to meeting the defects with which we had to contend so long, and at the same time it may possibly lead to a more intelligent use of this well-known remedy.

Besides the reduced iron, we have in general use the ferric and ferrous preparations, the latter being more mild, less astringent, and free from the objection to the ferric salts—that of coagulating albumin. Lethal doses of the ferric salts used intravenously, in experimental investigations, cause almost immediate paralysis of the central nervous system, fall of blood-pressure, and death. Although the perchloride, when thus used, causes instant death by coagulation of the blood, it does not act in this direct manner when introduced subcutaneously; the nerves are unaffected but at the points of elimination inflammatory action is set up, *e. g.*,

the kidneys, liver, and intestinal mucous membrane shows more or less effect.

Absorption takes place as a peptonate or albuminate, but it is taken up so slowly that no appreciable result follows, unless, as just stated, it may be used intravenously or subcutaneously. Absorption takes place more rapidly in catarrhal conditions of the intestinal tract—a fact to be borne in mind when exhibiting large doses, which cause gastro-intestinal catarrh. Small doses do not have this effect, nor does the metal appear in the urine from their administration, such as may be observed after the ingestion of large doses. It will be inferred from the foregoing that by the exhibition of small doses of a soluble preparation of iron it will be assimilated without causing derangement of the alimentary tract, and in this way the secondary effects, *i. e.*, the deposit of the metal in the system, may be avoided.

The fact should be kept constantly in view, that metals have a poisonous action upon nerves, nerve-centers, muscles, and upon all glandular structures; and as iron is a reputed hæmatinic, much harm may result from its injudicious employment, as there are evidently certain toxic effects following the long-continued use of insoluble preparations, and it is but reasonable to assume that, whatever harm has been done through this means, may have escaped attention, because few physicians are likely to investigate the presence of factitious diseases. Another factor which has contributed to lessen these evils, is the slow process of absorption.

The foregoing observations apply with equal force to the effects of the drug upon the circulatory apparatus. While copper is an active agent in causing contraction of the blood-vessels, iron produces slow contractions, showing that it is less irritant (stimulant) to the nervous system. This may possibly be accounted for on the hypothesis that iron is a normal constituent of the blood. Whether this effect is due to irritation (stimulation) of the vasomotor nerves, central or peripheral, or to a direct action upon the muscular walls of the blood-vessels, is a question still in doubt. My own impression is, that through the influence of the medication upon the nerve-cells the large doses comparatively, arrest their functions, when contraction of the muscular structures in the vessels take place. The ferric salts, owing to their property of coagulating albumin and blood, of course produced more marked

effects than the ferrous salts. Digitalis and ergot among the organic, and barium chloride among the inorganic, remedies, well-known as vascular tonics, furnish apt illustrations of this important principle.

Iron has a tendency to accumulate in the liver; small doses do not show this tendency, but they may serve to increase the functional activity of this organ, when given in a soluble, non-astringent form, by restoring cell-nutrition to the normal.

The effect of iron upon muscular structure has long been known to experimental physiologists, but I doubt if this knowledge is appreciated by many practitioners, who regard the possible benefits to be derived from the exhibition of iron preparations in proportion to the amount tolerated by the patient. Now, large doses, while they do not affect the irritability of muscular structures, lessen materially the amount of work it is capable of performing, while small doses increase the capacity of muscle for work. What is most to be desired, therefore, is a preparation not open to the objections inferred from these investigations; but owing to the necessity for consulting the palates of our patients, it is also desirable that the substance should be free from the nauseating effects which are so common to all preparations of iron. The combination, I believe, is to be found in that form known as levulose ferride, which was highly recommended to me several years ago by my friend, Dr. James Collins, of this city.

The preparation known as levulose ferride is one which takes the place of a well-known and popular German product, called *Eisenzucker* (iron-sugar), very extensively used in domestic practice.

I was led to the employment of iron-sugar on account of its palatability, fastidious patients and children making no objection to it; but this has been supplanted by levulose ferride, which in the form of tablet triturations will be taken as readily as chocolate bon-bons. It is readily soluble in an excess of water, and practically free from any ferruginous taste or styptic effect when dissolved in the mouth, and is substantially a peptonate. The following method of preparing it is briefly as follows: To a certain amount of iron a measured quantity of malt-sugar (maltose) is added, and the mixture constantly stirred while exposed on a water-bath. While it possesses all the desirable qualities mentioned,

the presence of metallic iron may be determined by chemical analysis, the strength of the product being about three per cent.

This preparation, it will be apparent, will act much less actively as an astringent than even the ferrous preparations; but, of course, it cannot be expected to take the place of the ferric products, which are sometimes demanded, as in the case of intestinal parasites (*sarcina ventricula* and *lumbricoides*). On the other hand it will be especially indicated for the relief of anæmia and chlorosis, owing to its ready absorption, lack of astringency, and its palatability. In all cases of defective nutrition, from any cause, where the ingestion of any form of medicament is a trial to the patient, this product will be kindly received. A synopsis of some of the cases in which it is indicated, together with a summary of the effects following its employment, may prove interesting to the physician.

During the early summer months, I had under observation a young mother with a six-months old child, who presented a very anæmic condition. I had seen her but once since the delivery of her child, and anticipating that she would not be able to nourish it sufficiently and maintain her health, I had cautioned her in regard to the most appropriate diet. Notwithstanding every care had been used, she was finally compelled to seek medical aid or go to bed. All that this patient required was something for the purpose of increasing the amount of hæmoglobin, which would restore the integrity of the red corpuscles and improve the oxygen-carrying capacity of the blood. This being most readily accomplished by levulose ferride, she was ordered to take tablets of this preparation, each containing three grains, after meals. To meet the emergency, and increase the patient's strength until such time as the advantages of the iron would be apparent, small doses of strychnine (one-sixtieth grain) were administered along with the iron. Ordinarily, this class of patients, when they begin in the early summer, suffer more or less from the effects of the heat, and become regular patrons of the doctor; but this patient did not make her appearance again for about two months, when she said she thought it was about time to have a little more of the same medicine. I may mention in passing, that the first medicine was sufficient only to cover the first ten days, and the patient seemed greatly disappointed that she was compelled to return.

So many children are so promptly benefitted by the use of a small quantity of iron, that it is a great drawback to us that no palatable preparation has been discovered and put upon the market. I have in my mind a little fellow, who has long been very much adverse to eating meat, due, I presume, to defective digestion; but for the past few weeks, since he has been taking the levulose ferride, he seems quite content to eat meat alone, and is becoming strong and robust. Not long ago I had a visit from a lady, who brought with her a young lad, aged fourteen, who had a most forbidding cadaveric expression, and he could eat no meat. His brother, I was told, had died at about this age from Bright's disease, and this one presented all the symptoms peculiar to the brother who died. Still, with attention to diet, out-door exercise in the country, and a tablet triturate containing three grains of levulose ferride after meals, he made a prompt recovery. Although I was unable to discover any symptoms of Bright's in this instance, I was impressed with the depression due to the anæmic condition, and yet, without some readily assimilable iron preparation, it would have been a tedious process to start him on the way toward recovery.

Late in the spring of the year, a gentleman, aged about thirty-five, called on me, complaining of dyspepsia, although he had been under the treatment of another physician for over-work for the preceding four years. After regulating his diet, and adopting treatment calculated to restore the activity of the digestive apparatus, he was placed upon levulose ferride along with strychnine sulphate—three grains of the former in tablet form, and one-sixtieth grain of the latter, and did remarkably well on this combination.

This product, like all other mild preparations of iron, is mostly indicated in cases of this class, and along with these may be mentioned chorea, convalescence from lingering diseases, like typhoid fever; and in all such instances, I venture to anticipate that the result will be especially favorable where proper attention is given to dietetic measures.

The administration of the remedy may be confined to the use of the powder, which is taken dry on the tongue, dissolved in water or coffee, or it will be found more convenient in the form of tablets, each containing three or five grains. The dose for children

ranges from three to ten grains, and for adults from five to thirty grains.

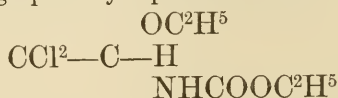
The Levulose Ferride was obtained through Messrs. Eisner & Mendelson Co., of New York, who import this article.—*New England Med. Monthly*.

NOTES UPON SOMNAL, THE NEW HYPNOTIC.

BY FRANK WOODBURY, A.M., M.D.,

Fellow of the College of Physicians of Philadelphia; Hon. Professor of Clinical Medicine in the Medico-Chirurgical College, Etc.

Last fall Radlauer,* of Berlin, brought to the notice of the medical profession a new compound to which he gave the name of Somnal, in acknowledgment of the remarkable hypnotic properties which it appeared to possess. It was formed by the union of chloral, alcohol, and urethane, according to the original notice,† but is not a simple mixture of these bodies. It differs from chloral-urethane by the addition of C^2H^4 , its formula being $C^7H^{12}Cl^3O^2N$. The method of manufacture is by direct combination of chloral alcoholate and urethane in a vacuum apparatus, according to its discoverer, who states ‡ that its composition might be graphically represented thus:



Specimens of this new hypnotic having, through the courtesy of Messrs. Eisner & Mendelson Co., been placed in my hands for examination and trial, I will here very briefly communicate some of the results thus far obtained, reserving my final judgment upon the drug until experience has been more extended.

Physical Characters.—Somnal is a colorless liquid, resembling chloroform in its appearance and behavior when added to cold water, in which it forms globules and refuses to mix or dissolve. When

*Zeitschrift des Apothekers-Vereins, Nov., 1889.

†Journal de Medecine, Oct. 20, 1879.

‡Pharmaceutical Journal and Transactions, Nov., 1889.

shaken with water, the mixture is milky but quickly separates. It is soluble in hot water and alcoholic solutions, and dissolves resinous substances and fats. The odor is faint, not very penetrating or disagreeable, and resembles that of spirits of nitrous ether or recrystallized chloral. The taste is very pungent; and for administration it needs free dilution. It may be given with whiskey or solution of tincture of zingiber or syrup of licorice. Somnal is inflammable, burning with an alcoholic flame; it does not evaporate quickly, and leaves a greasy stain upon blotting paper. Specific gravity greater than water; reddens litmus paper slightly.

Physiological Effects.—In its action it resembles chloral in quickness of effect and naturalness of the sleep produced. No marked depressing influence was exerted upon the pulse or respiration rate, though it was noticed that the breathing became slower and the pulse slower and fuller as in natural repose. No disagreeable after-effects. The head was clear and the stomach was unaffected; the patients generally had an appetite for breakfast. No constipating effect. The kidneys acted rather more freely than usual. My colleague, Dr. Ernest Laplace, to whom I gave some of the drug for trial at the Philadelphia Hospital, writes as follows:

“I have given somnal a fair trial upon six patients at the Philadelphia Hospital, In no case were the patients told what was given them, so outside of the bare possibility of the patient falling asleep through natural causes, somnolence was brought on by the drug. It was administered in a solution of tinc. zingiberis, in half-teaspoonful doses, and was found palatable.

“Administered at 4 p. m., at a moment when patients were not generally asleep, in four cases sleep came on within half an hour; which lasted from five to eight hours the two other cases showed no effect from the drug. It is their habit to get at least gr. $\frac{1}{4}$ of morphine sulph. to put them asleep every night, as they are sufferers from intractable malignant growth.

“In no case was there any noticeable after-effects.

“I have not formed any opinion upon the length of time that the drug could be used daily upon the same patient.

“To this I might add that no depression of the normal temperature was noticed in any in case myhands, and thus far I have not used it in pyrexia.

Therapeutic Application.—The effects of somnal in producing natural sleep suggested its use in insomnia. The first case in which I used it was in a patient suffering with acute alcoholism, who had been under treatment for a fortnight in an institution where he had a free supply of liquor and came out rather worse than he went in. He was 39 years of age, very tremulous, and could not sleep, or if he dosed off would immediately wake up. I gave him, at about 3 p. m., thirty minims of somnal (or rather a drachm of a mixture of equal parts of somnal and whiskey), well diluted, and went into an adjoining room to speak to an attendant. Upon my return I was surprised to find him fast asleep, although I had not been away from him more than fifteen minutes. He slept for four hours, and then was able to take something to eat. At ten o'clock he had another dose and he slept until seven the next morning, having wakened up once only during the night and insisted upon having another dose, and immediately after taking it fell asleep again. The next night he was given a double dose at 10 p. m., and he slept all night without wakening. No bad effects were observed. The somnal was given for four nights, when he was so nearly well that it was suspended, as he had had good natural sleep at night and seemed quite restored. Alcohol was positively prohibited, the only substitute allowed being Elixir of Coca and Camellia (P. D. & Co.), in tablespoonful doses, in which it is true there was a small amount of alcohol, which was quite infinitesimal when compared with what he had been using. Somnal, therefore, acts well as a hypnotic in acute alcoholism as a tranquillizer and hypnotic.

In a case of neuralgia of the bowels (visceral neurosis of Allbutt), where the patient had a sleepless night, a dose of twenty minims relieved nausea and pain, and the patient fell asleep.

In syphilitic headache and insomnia, somnal in moderate doses failed to produce sleep, which was afterwards secured by potassium bromide and iodide, and antipyrine.

In cases of insomnia, fretfulness, and restlessness in young children, somnal with mint water and syrup offers better results than opiates, and is much safer. The same remark probably applies to the use of somnal in acute pneumonia, but I have not been able to confirm this yet by actual trial.

Without further going into detail it may be stated in conclu-

sion that somnal acts as a hypnotic, but instead of depressing the system as chloral does, it slightly stimulates the gastric mucous membrane, relieves nausea and pain, improves the appetite, increases secretions (probably), does not cause constipation. The circulation, respiration, and temperature are not notably depressed after its administration. No disagreeable after-effects have been observed. As it is rapidly eliminated from the body it may be administered each night for a number of days without any obvious ill-effects. It acts very much like chloral, but is more pleasant to take and not so depressing in its effects upon the nervous system and the circulation.—*The Dietetic Gazette*.

ABSCESS OF THE BRAIN FOLLOWING PURULENT OTITIS MEDIA.

Picque (*Ann. des mal. de l'oreille et du larynx*) reports a case of this nature occurring in a man, aged forty-six, who had had the influenza in December, in 1889, followed by acute suppuration in the right ear and an abundant discharge of pus. The pain in the ear, which had ceased on the appearance of the purulent discharge, returned on April 16, 1890, and became very violent. The mastoid was opened on April 18th, but no pus was found. Picque then determined to open the skull over the fissure of Rolando, as the patient had become hemiplegic on the left side. After making a large opening with the trephine the dura mater was incised, and a considerable hernia of the brain at once took place. An exploratory puncture in the brain was at once made, on a level with the middle portion of the ascending frontal convolution, and a large quantity of pus evacuated. All symptoms improved on the same day, but the patient died comatose a week later. The autopsy revealed a general encephalitis.—*New York Medical Journal*.

Editorials, Reviews, Etc.

PUBLISHER'S NOTICE.—The JOURNAL is published in monthly numbers of *Forty-eight pages*, at one dollar a year, to be always paid in advance.

All bills for advertisements to be paid quarterly, after the first insertion of the quarter.

Business communications, remittances by mail, either by money-order, draft, or registered letter, should be sent to the Editor, C. S. BRIGGS, M. D., Cor. Summer and Union Streets, Nashville, Tenn.

All communications for the JOURNAL, books for review, exchanges, etc., should be addressed to the Editor.

OUR IMPROVEMENT.

The improved appearance of the January number, despite the numerous typographical errors that marred certain portions of the editorial pages due to the careless hurry of our printer, has elicited words of praise from all sides. We shall take the greatest pains hereafter to spare our readers the infliction of such typographical traumatism, for if our readers resemble ourselves, the aimless excursions of the befuddled compositor cause them to have an attack of what Mrs. Gummidge so graphically describes as a case of "the creeps."

Nevertheless, whether it be due to the reduced price of subscription or to the better appearance of the JOURNAL, the subscription list has steadily grown beyond our most sanguine expectations, and before many months have passed we can confidently lay claim to a circulation of several thousand copies. Why not? Surely a better journal for the money cannot be had. Its original department contains articles which any medical periodical would be glad to publish. The excerpt department is made up of short practical articles, carefully selected from home and foreign jour-

nals. The editorial pages will be devoted to short pointed articles, dealing chiefly with matters of pressing interest to the medical profession. Careful attention will be given to honest notices of such books and publications as may be sent the JOURNAL. In every way the editor will strive to present a first-class, readable, interesting and instructive medical journal.

In this connection we would call the attention of our delinquent subscribers to the advantageous offers made them, one and all, in certain personal letters sent them recently, and we hope they will not be slow to respond. Obligations on both sides should be consistently observed and if the publisher carries out his portion of the contract it is but reasonable that the subscriber should show his appreciation by a timely remittance. Let every one send in his amount of indebtedness and liquidate in due form.

To such physicians as receive sample copies of this number we would express the wish that they fill out the enclosed blank and thus become subscribers without delay.

OUR MARCH NUMBER.

We are pleased to announce that the March number will contain a number of exceedingly valuable papers. The charge to the graduating class by Prof. Richard Douglas, a lecture upon Hypnotism by Prof. T. A. Atchison, a carefully prepared exhaustive and scientific paper on aseptic and antiseptic surgery by Prof. Clarence E. Lewis, M.D., of Knoxville, Tenn., and other articles will appear, which, together with the usual variety of clinical reports, society proceedings, extracts and editorials will make up an unusually interesting number.

We find that we are so crowded in this issue for room as to be compelled to omit book notices, and notices of our numerous new

advertisements. We shall devote considerable space in our next number to these obligations. Attention is especially called to the new advertisements that appear in this number.

OPENING OF THE NEW HALL OF THE NASHVILLE ACADEMY OF MEDICINE AND SURGERY.

Fully sixty members of the Academy of Medicine and Surgery assembled in the elegant new quarters recently secured and rented for a term of years in the Mills Building, January 15th. A very full and attractive programme in honor of the occasion of taking possession of the new hall had been published. The President, Dr. James B. Stephens, delivered an eloquent address, dedicatory and congratulatory. Dr. W. H. Haggard recounted the chequered history of the Academy from its organization to the present time. Dr. J. P. McFarland entertained the members by a spirited and humorous talk upon the "Medical Profession of Nashville, its Standing at Home and Abroad." "The Doctor—Who is he, Socially and Professionally," was the theme of an interesting disquisition by Dr. J. R. Harwell. Dr. J. Y. Crawford made an eloquent plea for the necessity of "Specialism in Medicine." A paper upon some "New Truths in Ophthalmology," by Dr. G. C. Savage, was read by the Secretary in the absence of the author. "Koch's Discovery" furnished the subject of a careful resume of the much talked of method, by Dr. J. R. Buist.

The meeting was particularly auspicious and happy in every respect. The new quarters are most elegant and amply spacious. The room is magnificently furnished with handsome carpet, chairs, tables and book-cases. The Academy is prosperous to such a degree that there is even now some talk of building a hall instead of renting one, at no distant day.

The next regular meeting will be held Thursday, February 5th. The special order for that meeting being Dr. Buist's paper on

Koch's Discovery. The growing interest of the local profession in this flourishing society gives full assurance of future prosperity and its transactions even now will compare favorably with those of the best organized body of the kind in America.

DEATH OF A MEDICAL STUDENT.

On the evening of January 10th, Preston Perkins, of Triune, Tenn., a member of the medical class of Vanderbilt University, accidentally shot himself while examining a pistol, dying a few moments afterwards. His death was a great shock to his fellow-students and numerous friends in this city.

He was a good and faithful student, well liked by every one with whom he was brought in contact and possessed of qualities which would have secured for him a successful professional career.

The medical class assembled the day after his death and passed the following resolutions:

WHEREAS, In youth, health, and strength, one of our number, Mr. PRESTON PERKINS, of Triune, Tenn., has succumbed to the inevitable destroyer, Death. Whereas, sorrow and regret is the common feeling among us at his untimely end,

THEREFORE, be it resolved,

That we the members of the Medical Department of the University of Nashville and of Vanderbilt University extend our heartfelt sympathies to his family, and many friends.

That in his death, we have sustained the loss of one who would, in years to come, have reflected honor upon us, our school, and our profession, a valued friend and classmate.

That the class attend the funeral services in a body.

That the class wear a badge of mourning for thirty days.

That a copy of these resolutions be handed to the family, a copy to the Vanderbilt Observer, a copy to the daily papers for publication, and also a copy to the NASHVILLE JOURNAL OF MEDICINE AND SURGERY.

That they be spread on the Record Book of the class.

J. H. PEEBLES.

E. L. STEWART.

A. B. COOK.

J. M. JOHNSON.

W. H. HARRIS.

W. STACKHOUSE.

A. B. BLACKMAN.

A. G. HAYGOOD.

O. J. SINGLETON.

S. A. CONKWRIGHT.

J. M. ROPP.

E. K. WHITE.

K. H. SMITH.

W. W. LUMPKIN.

T. WALKER.

Jan. 11th 1891.

Committee.

We desire to call the attention of our readers to some of our new advertisements.

The Salutaris Mineral Water of St. Clair Springs, Mich., occupies an entire page. This water will compare favorably with any table water in the world. For sometime back we have been using it exclusively, and can safely assert that it has few equals, no superior. It is simply delicious.

Dr. Douglas' Infirmary is one of the most thoroughly equipped private hospitals in the South. It is in every sense of the word a veritable home for the sick, luxuriously equipped, and handsomely appointed.

The Law Battery has taken front rank among the electrical medical instruments. It is cheap, neat and clean. Its simple construction commends it to the notice of every physician.

ANNOUNCEMENT.—E. B. Treat, Publisher, New York, has in press for early publication the ninth yearly issue of the "International Medical Annual.

Its corps of thirty-seven editors—specialist in their respective departments, comprising the brightest and best American, English and French authors—will vie with previous issues in making it even more popular and of more practical value to the medical profession.

We have the assurance of some of the best medical practitioners that the service rendered their profession by this annual cannot be duplicated by any current annual or magazine, and that it is an absolute necessity to every physician who would keep abreast with the continuous progress of practical medical knowledge.

Its Index of New Remedies and Dictionary of New Treatment epitomized in one ready reference volume at the low price of \$2,75, makes it a desirable investment for the busy practitioner, student and chemist.

IN PRESS.—Sexual Neurasthenia, By G. M. Beard, M. D. and A. D. Rockwell, M. D. Third edition enlarged, \$2,75.

IN PRESS.—Diabetes, Lectures on, By Robert Saundby, M.D., Edinburgh. 300 8vo pages, \$2,75

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C. S. BRIGGS, M. D., EDITOR.

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MARCH, 1891.

NUMBER 3.

Original Communications.

CHARGE TO THE GRADUATING CLASS.*

BY RICHARD DOUGLAS, M. D.,

Professor of Diseases of Women and Clinical Gynecology in the Medical
Department of the University of Nashville and
of Vanderbilt University.

Ladies and Gentlemen, My Colleagues, Gentlemen of the Class:

Another year in the history of the University of Nashville and Vanderbilt University has come to an end, and to-night your professional birthday is in full celebration.

Selected by my colleagues to the high and honorable position in which I appear, it is only fitting that I should commence my

*Delivered at Masonic Theatre, Nashville, Tenn., February 27, 1891.

task by thanking them for this fresh proof of their confidence and esteem; it is a gratification to my pride, however little I may have done to deserve it. Feeling so deeply the responsibilities of my office, I stand in open amazement at my presumption, in attempting a task so far beyond me, and am painfully conscious that I have little to say which has not been better said many times before. Yet, I am here as the representative of the Faculty to do my duty as best I can.

May I, ladies and gentlemen, remind you that this is no ordinary ceremony you are invited to witness? The occasion is solemn and full of significance. After years of faithful labor, these young men are about to receive at our hands the honorable degree of Doctor of Medicine. Can you appreciate the full force and meaning embraced in this parchment, and the privileges it confers? We, as individuals, and as a medical faculty, endorse our graduates as men of ability, character and skill, and into their hands we entrust the honor and reputation of the Universities we represent.

It is scarcely within the scope of my theme, yet I cannot refrain from publicly expressing my wonder and lament at the indifference and want of appreciation evinced by the community and state at large, in medical education, in our schools and colleges. We owe nothing to the state and but little to the enlightened munificence of private individuals, and while our scientific work is thus impeded for want of facilities, upon the other hand it has developed the latent spirit of self-reliance. It is by the unaided labors of almost half a century that this faculty has elevated the Universities to their present proud position.

It may appear unnecessary, and perhaps self-laudatory to speak further of our College, yet I cannot permit this opportunity to pass without impressing upon our wise counselors and worthy Board of Three, that the medical school is an organ of vital importance in the economic whole. In the application of science Nashville can point with glowing pride to the multifarious industries which have here found a home. Here there exist and flourish, side by side, mills, factories, and foundries. The greatest iron and mining interest in the South, pays into our city treasury its privilege tax. Our merchants and bankers have won for us the undisputed title of Com-

mercial Center of the South. Is it necessary to claim that as an educational point we are unapproached by any southern or western city? Are we not ambitious that our city should become cosmopolitan? Are we not proud of the advance she has made in that direction? Is it not through the encouragement of industry, science and art we invite the stranger within our gates? Do you appreciate, gentlemen of the governing board of Nashville, that the broadest, the most cosmopolitan of all arts is that of medicine? Attracted by the high and honorable name we bear, students come to us from the most remote parts of the Union, bringing with them thousands of dollars to enrich our merchants and gladden the hearts of the boarding-house keepers. When the college term is over they return to their distant homes loud in their praise of the name and fame of the glorious "City of Rocks."

You have builded and equipped a magnificent hospital—a monument to your wisdom and munificence. Let us hope you will extend such privileges to our college. Students will be only too glad to avail themselves of the advantages. Let us for a moment view the hospital as a place for the study of the medical art; our inmates, the patients, receive every possible benefit by the recent advances in medicine and surgery.

"The teaching of medicine and the presence of students in the ward should be recognized as a great benefit both to the institution and to the individual patient." Maintaining, then, that in our service, you are fully compensated for the privileges granted, does it appear reasonable, just, and in keeping with the spirit of progress you should so burden us with taxation?

Pardon, then, this passing allusion to our own affairs. And, now, my friends, gentlemen of the senior class, what can I say that will prove helpful to you in your future career?

It has been said that there is a great deal of human nature in man; if this be true I cannot be wrong in assuming that in the seats before me there are hearts beating with the same excitement, and minds full of the same aspirations as filled my own when, nine years ago, I, a member of the graduating class, listened to an address from that elegant gentleman, finished scholar, and skilled surgeon, our lamented friend and colleague, Prof. Van S. Lindsley.

There is no greater nor truer pleasure in life than the achieve-

ment of a laudable purpose towards which the full force and energies of one's character has been directed for a definite time. That pleasure is yours to-night ; your task is, in a measure, complete. This vast assemblage is gathered together in your honor. Must not the contemplative mind find food for serious reflection in looking upon so many young men just at the portal of a new life? It is most probable some one of you by his discoveries in medicine, or triumphs in surgery, will add luster to your *alma mater* and achieve a reputation rendering this night memorable. Only the chosen few can hope to attain fame, but most of you will fight the battle with sickness and death, and at times in your careers hold in your keeping the secrets, the honor, the happiness of homes. The difficulties and dangers attending a doctor's life are thick and blinding. Under our guidance and instruction you have simply made ready for the noble work to which from this day henceforth and forever you must devote all the powers and energies of your nature. Medicine is a jealous mistress. To retain her distinguished affection everything in life must be subservient to her sway. The part you have engaged to enact in the drama of life is not an easy one; the sacrifices you have made and will still be called upon to make, your inexperience, your burning enthusiasm, all appeal to our sympathies, hence it is I am here to-night as a friend, fellow-student, and teacher, to caution, guide and direct you on your way.

My first counsel to you is to preserve with loving care the sacred traditions of home. Most of you have left simple, quiet, happy country homes, inspired, we hope, by the highest motives, determined to follow a doctor's life. Half intoxicated by the freedom and the engrossing novelties of your college life you have been exposed to the perils of temptations from the weak, the idle and the dissolute. These are dangers surrounding every young man. There are others more terrible for the medical student. It is the danger of falling under the influence of the intellectual and unbelieving; by them he is beguiled, reasoned and ridiculed out of the sacred faith of his childhood.

With scalpel and bistoury we dissect the human body, muscle from muscle, bone from bone, and nerve from nerve. These are all things material, susceptible of demonstration in that inanimate and decaying mass upon the anatomical table. Even with the microscope

we fail to find aught that speaks of the soul. Hence it is the medical student soon becomes an apt pupil, a blind disciple of some spouting egotist. He forgets the religious training of his childhood, or else rejects it as groundless and superstitious. Priding himself upon his rapid advance, he becomes for the time at least a materialist or else a blatant agnostic. It is true the revelations of science are incompatible and tell somewhat heavily against many of the dogmas and "formula in which men attempt to set forth religious truths," but the "dogmas of men are as different from the truths of God as a crystal is different from an organized cell." We can have only sympathy for those men of science who are vain enough to doubt that behind all facts and forces in nature there is a great and essential Being.

If it is true that the orator, the artist, the poet, are so born, not made, then that dogma must apply to the doctor. The possession of the elements of success rest almost entirely with yourself.

There are great doctors whose personal appearance are more repulsive than attractive, whose manners are rude rather than pleasing and engaging. Such men have sprung from obscure parentage, unendorsed and unaided by either family, influential friends or wealth, yet they have risen to the highest pinnacle of success. Deprived of all these collateral advantages by which we set such store, why and how did they attain success? They were all men of character, all possessed of individuality. Individualism implies concentration of thought, tenacity of purpose, self-reliance, (Montague Jones), not peculiarities or eccentricities. Individuality is the outward expression of a truly strong man. Everyone of you possesses some individuality; by it you are known from your associates, compared and valued accordingly. You may not be so richly endowed with striking characteristics as to entitle you to the distinction of a genius—few men are Hunters, Sims or Taits—yet you all possess an individual self, and it is your duty to cultivate it. So train and direct your studies and labors that you yourself will be convinced as to the strength, honesty and correctness of your conclusions. Relying upon your own convictions you will labor all the more zealously to perfect them. In establishing your character as men and doctors take upon yourself the full weight and responsibility of the occasion; your self-

confidence will encourage your friends and patients to believe and trust in you. Be true to your own character, affect not the known peculiarities of others. By nature we are all apes. It is so easy, so comfortable and lazy to accept the thoughts and manners of others, why sacrifice our lives in the endeavor to establish a striking individuality? "Character is nature in its highest form, nothing but itself can copy it." (Emerson). Our government is esteemed at home and abroad by the character and individuality of our statesmen in Congress assembled. Just so, gentlemen, will the great profession of medicine stand in the eyes of the world, according to the character of its component members. You will find much to try, vex and discourage you in the practice of medicine, but you must be firm and of good courage. Cultivate patience and forbearance, remembering always you are contending with the sick, the afflicted, the diseased and the dying. And, like good actors, you must so enter into the spirit of your part, so comprehend the mental and moral character of those about you that you may think their thoughts and feel their feelings. Sympathy, human sympathy, a knowledge of suffering and its wants, a pride and pleasure in giving relief constitute a true physician.

The relation between physician and patient are in many instances so confidential and intimate it is not surprising if, from time to time, cases occur which disturb the public mind. There never was so much expected of the doctor as now. Of course this prominence has its drawbacks. "As the light is fierce that beats upon a throne" so is it occasionally a little difficult to live up to the popular ideas of a medical man. A doctor is expected to be as self-sacrificing as a clergyman, who is sustained by supernatural hopes.

But, gentlemen, why rebel against fate! We have warned you that the charms of medicine are hidden beneath many difficulties, yet you have chosen to cultivate this spot in the great garden of the universe. The soil is rich and productive, shall it yield beautiful flowers and luscious fruits—emblems of love, happiness and success; or, shall you permit the weeds of idleness and neglect to convert it into a wilderness? Accept the place and duty assigned you, discard envy and jealousy, trust thyself alone, believe in thyself alone, all the nourishment, the happiness,

the luxuries and comforts of life will come to you through self alone. Therefore, cultivate self-reliance. In the hour of danger, in an emergency, what time is there to consult the old authorities lying in dust-covered books at your office; nay, even less time is there to send for a consulting surgeon.

Your knowledge and skill must be at your finger tips, thus armed you will not be wanting in the courage to act upon your convictions. While I encourage you to be firm, bold and decisive, let me urge prudence. "Prudence," says Emerson, "is the virtue of the senses; it is the science of appearances." In all of us there are essentially two beings; not, I hope, a Dr. Jekyll and Mr. Hyde, but two selves; an inner self to which we must needs be true, and an outer self which does not exist for itself but for the world. A doctor must be prudent in speech, remembering that to his keeping the secrets of state, the honor of woman, the happiness of homes are all entrusted. Observe prudence in manners and habits. Important is it that you should observe the greatest prudence in all your professional relations, a duty you owe your patients as well as yourself.

Lastly, and above all, throw all the might, and power, and energy of your being into this labor of your life. Attain knowledge, for in the possession of that alone rests your only hope of success.

"The heights by great men reached and kept were not attained by sudden flight,

But they, while their companions slept, were toiling upward in the night."

Much of your daily work may be routine and monotonous, and much will be repulsive to your finer feelings, yet all is full of transcendent interest. The book of nature lies open before you, in its pages we may read of human life, its development and decay—ever varying problems. There is work, new, fresh work in in every department of science. You must press forward; it is impossible for a doctor to stand still, it is ignoble for him to go backwards. There can be no resting place, no finality. Stimulated by the character of your work, to relieve suffering, to cure disease, to preserve health, these are the objects of your life. He is a poltroon or laggard who hesitates to obey.

Now, gentlemen, I have done. Would that I could have acquitted myself in a style more fitting my great theme. In taking

leave of you as students let me again impress upon you that your *alma mater* looks to you to uphold the honor, dignity and glory of her great name. You are no longer students, but to you as physicians, co-laborers in the broad field of science, it only remains for me, in behalf of the faculty, to welcome you into the ranks of the profession, and to wish you a prosperous, animated and successful career.

SEPSIS AND ANTISEPSIS

BY C. L. LEWIS, JR., M. D.

Professor of Physiology in the Tennessee Medical College, Knoxville, Tenn., and formerly House Surgeon Bellevue Hospital, N. Y.

The first time I ever heard the word antiseptis used was in the Medical Hall, University of Virginia, 1886. Dr. Cabell, now deceased, was remarking upon the revolution which was taking place in surgery. These were his words: "The last time I was in Bellevue Hospital a lecturer called for a drop of pus, to demonstrate microscopically its pathological characters. Upon inquiry not a drop of pus could be had in that large institution of some eight hundred beds. This, said he, was due to the introduction of the antiseptic treatment of wounds." This forcible statement upon the mind of a medical student was an everlasting one, and years afterward, when I had the opportunity, in Bellevue, of opening the knee joint of a rheumatic (gonorrhœal) patient, irrigating the joint without a drop of subsequent suppuration, the statement of years ago came back to me bringing with its truth memories of pre-antiseptic times when injury to the knee joint (proper) required amputation of the thigh. Several months have passed since Koch astonished the civilized world with his great discovery in the line of bacillary diseases—a discovery based upon the teachings of Lister and Pasteur—a discovery which is destined to open new fields to the medical scientist as well as to revolutionize medicine upon the same general principles that has revolutionized surgery—antiseptics. Surgeons irrigate infected wounds with antiseptic solutions to kill the bacteria of suppuration therein. When they effect this destruction suppuration in that wound ceases. Genito-urinary surgeons irrigate the urethra of their (gonorrhœal) patients with antiseptic solutions to kill the gono-

coccus, when they effect their destruction the clap is cured. Now comes the physician, hypo. in hand, and injects his antiseptic into the capillaries, for precisely the same purpose—its germicidal power. Since surgeons kill bacilli in their wounds, why is it so difficult to kill bacteria of such diseases as typhoid, scarlet, and other fevers? When antisepsis was first discovered physicians concluded that they could inject antiseptics into the systemic circulation, and thus destroy the germs. This was a forlorn hope, for the remedy was more deadly than the disease, so for years we have been resting upon our oars, waiting for an agent which would prove more destructive to the bacteria and not a poison to the patient.

Have we at last found that antiseptic? Candidly I believe we are nearing the solution of the problem. The active principle of Koch's lymph, according to my belief, is the "ptomaines or bye-product of the tubercular bacillus."* If such is the case the future is sure to bring into use the ptomaines of every infectious disease and, necessarily, a "treatise upon ptomaines." That Koch's method has not been perfected is evidenced by his large number of patients and the comparatively small number of cures. There is a belief that it is most efficient in tubercular laryngitis, but we hear as yet of no cures. Its specific action upon lupus is interesting. Temporary cures have certainly been produced, but toward pulmonary tuberculosis it has shown no special remedial power. What perfection of methods will produce I am as yet unable to say.

SEPSIS.

Suppuration is always due to the introduction of special septic organisms (streptococci and staphylococci) into wounds of living tissues. The "cocci" above named are the special organisms of suppuration (proper). Every suppurating wound is, therefore, infected with these special organisms. But every infected wound is not a suppurating wound. For example, take a wound which has become infected with bacilli of erysipelas. It does not suppurate, or if it has been suppurating it ceases when infected with the bacilli of erysipelas. This is due to the antagonism between the bacilli of suppuration and erysipelas, consequently a bacillus of

*Koch's paper, just received, proves the correctness of my assertion.

erysipelas will destroy a bacillus of suppuration. This antagonism between bacilli of various species will be touched upon later.

Conditions requisite for the development of

BACTERIA.

First, An alkaline or neutral medium is necessary to their growth; acids arrest their growth.

Second, Some require oxygen, others do not.

Third, Some develop in dead organic matter, while others develop in living tissues, such as lepra-tubercular parasites, etc. These are the bacteria against which we battle. It is probable that there are as many varieties of bacteria as there are infectious diseases.

Fourth, Temperature between 30°-40° C. All cease to develop at 5° C., but are not destroyed. All are destroyed by boiling water or steam at 100° C. Acting for a certain time with dry heat a higher temperature 140° C. is required for their destruction.

Fifth, Moisture. It is a well-authenticated fact that animal tissue, if exposed to the atmosphere of certain climates, will not decay, but will dry without any retrograde metamorphosis, thus showing that something is wanting which is essential to the growth of the organisms of decomposition. Examine a meteorological chart of such a climate and it will show you that the rainfall is nominal, that there is no moisture. On the contrary, flesh decomposes very rapidly in moist climates. Pathologists have demonstrated that moisture is essential to the life and growth of bacteria.

This leads me to speak upon the application of the above knowledge to the treatment of our wounds.

You see the surgeon flush the septic wound with antiseptic solutions and then put a thick dressing over all. Now, what conditions have we? "Moisture" in the wound and "heat" from the thick dressings, combined with the body heat, converts the whole into a veritable poultice. If at any time a bacillus enters he finds all conditions in its favor. I am in favor of using less moisture about our wounds. In drying them thoroughly. In other words, to take from the wound that great factor in bacterial growth, "moisture."

CONDITIONS TENDING TO ABATE OR ABOLISH VITALITY
OF ORGANISMS.

First, Exhaustion of nutritive material.

Second, Accumulation of their waste products, such as phenol, scatol, asparagin, leucin, tyrosin, indol, etc.

Third, Replacement of one variety by another, lupus, (tubercular bacillus) arrested by attack of erysipelas. Anthrax is destroyed by same bacillus.

EFFECTS OF BACTERIA UPON LIVING TISSUES.

First, They deprive the tissues of albumens, carbohydrates, oxygen, etc. Taking the same, not only from the blood and lymph, but from cells, thus depreciating their vitality.

Second, They decompose the acquired material into various substances, such as NH_4 and derivatives CO_2 H_2S . Scatol, indol, phenol, leucin, tyrosin, asparagin, etc., part of the above, are identical with the ordinary waste products of the animal organism and are harmless. Others, "ptomaines" act as poisons. These differ according to the variety of species producing them in intensity and effects upon the organism. It is upon this knowledge that Koch has formulated his treatment of tuberculosis, and as the above rule applies to bacteria in general, my former statement of a new school of "ptomainology," is justified.

Third, They act as "pathogenic" organisms.

SURGICAL ANTISEPSIS.

In surgery we recognise three stages in which our antiseptic measures are of avail:

First, Pre-operative; second, operative; third, post-operative.

Pre-operative. In this stage our measures are mostly preparatory and hygienic. The condition of the parts will determine our mode of procedure. If suppuration has taken place our measures are directed to the cleansing of surrounding parts, of the part itself, and to render, as far as possible, the retention of the infective material in its original pocket. Suppose we have an abscess of large size. The indications would be to remove all hair from the part by a good shave. This also seems to serve a good purpose in removing the superficial layers of epithelium and the sebaceous material (with countless thousands of bacteria) which

collect thereon. I firmly believe that a good shave is an important measure which no surgeon can well dispense with.

The question arises, what is the use of these precautions when a pint of pus underlies your field? This objection may seem feasible to the laity, but to those who remember the deadly infection of wounds by the poison of erysipelas, hospital gangrene, etc., can well see the propriety of these precautions. The question whether it is better to prevent the reinfection of our wounds or, by neglect to open a passage for the more deadly foes, erysipelas, and hospital gangrene than the bacilli of suppuration, is well shown by the records of our hospitals, where hospital gangrene, etc., are unknown. After shaving, a good douche of bichlor. 1.2000, will render inert all sepsis that may have remained.

Second, If the parts have not suppurated, such as in plastic operations, etc., the above measures apply. Be careful to expend as much energy on your wounds which are subject to reinfection as on your aseptic wounds. A drachm or so of ether poured over site of operation will remove any fatty matter.

SECOND OR OPERATIVE STAGE.

If suppuration exists I am accustomed to irrigate the wounds with a solution of bichloride of mercury, 1.2000, and then to pack the wound with bichlor. gauze, same strength.

In wounds infected with virulent poison (chancroidal bubo), I am in the habit of irrigating with a solution of bichloride (1.500) after which I wash any surplus of this poisonous solution from the wound by means of sterilized water or Thiersch's solution. 2nd. If there is no pus, I operate under a stream of bichlor. 1.3000. Of the many cases of osteotomies I have seen performed only one did badly, and that was due to ill attention to the rules of antiseptis. In suppurating wounds drainage should be provided. In aseptic wounds drainage is not required.

POST-OPERATIVE STAGE.

After drying the wound thoroughly with antiseptic sponges, my next move is to place the wound under such protection as to render the entrance of sepsis impossible. I do this by dressing the wound with *dry* bichlor. gauze 1.2000. I underscore the word *dry* because my ideas tend toward the dry treatment of wounds.

Mark these words, "the drier you keep your wound the less danger of infection." If the wound suppurates from pre-existing sepsis or from neglect, dress it daily and by using strong antiseptics you may render it "aseptic." In trying by this method to kill the sepsis in the wound by the use of bichloride of mercury 1.1000, and fresh dressings, if the wound does not suppurate the patient's temperature will remain normal. After seven or ten days you may remove this dressing and find a firm cicatrix.

Note.—I use the words bacilli, bacteria, organisms, etc., synonymously.

MRS. ABBOTT AND DR. PORTER—A REPLY.

BY D. T. SMITH, M. D., OF LOUISVILLE, KY.,
Lecturer on Medical Jurisprudence in University of Louisville.

A friend has just handed me a copy of the NASHVILLE JOURNAL OF MEDICINE AND SURGERY, for December, in which I find an article from the pen of Dr. O. J. Porter, of Columbia, Tenn., entitled "A Criticism of an Article by Dr. D. T. Smith, of Louisville, Ky., on Mrs. Abbott, the Little Georgia Wonder."

On perusing the article, I was at once brought to realize that I had actually been flayed alive. And what is worse still, not having the good fortune to be a subscriber to the JOURNAL, I had been going about during all this biting wintry weather, in blank ignorance of the fact that not a scale of cuticle stood between the end organs of my sensitive nerves and the rude boreal blasts.

Dr. P. seems to be fairly prancing with impatience that the world, and the rest of mankind, have not recognized the fact that he has triumphantly exposed, or if he wants to, can triumphantly expose, the frauds of Mrs. Abbott, the Little Georgia Wonder. And, poor me, who had dared to publish, in pamphlet form, facts that I had observed, in company with a number of gentlemen of the highest standing, and to offer such explanation of them as occurred to me, and I am to be subjected to the reversed fate of my illustrious namesake of the sling episode, and to be impaled on the spear of this young Goliath.

For this time, it is David that is slain, and not the giant.

But really it seems to me that the strong ought to set the example of keeping down their angry passions when dealing with the weak, and that Dr. P. should excuse or, at all events, punish without anger, the temerity that has dared to form an opinion without asking permission of him.

Hereafter, now that his title is established, he will be fully justified in dealing severely with such as rebelliously question his power and prerogative. His ability in the exposure of false claims and in righting hoary wrongs should no longer fail of the fullest recognition.

One single sentence from his "Criticism" ought to demonstrate this conclusively to any comprehension. "Newton," writes Dr. P., "gave us the Euclid, Johnson (?) his works, but Smith, a sample of either the most contemptible ignorance, or unscrupulous knavery, that has been laid before the medical profession since the days of St. John or Hahnemann." Now, when one reflects that Newton, for about twenty-two centuries, has been cheated of the honor of having given "the Euclid" to the world, every writer in all those years ascribing its authorship to an Alexandrian Greek of the third century before the Christian era, and then reflect for how many centuries St. John has been posing as a paragon of wisdom, and goodness and gentleness. while all the time he had been surpassed by nobody except Smith and Hahnemann in the quality "of either the most contemptible ignorance or unscrupulous knavery" he had "laid before the medical profession," does it lie in one's heart to deny that the brilliant genius that brings to light the truth in these matters, has the right to expose Mrs. Abbott, the "Little Georgia Wonder?" And his claims are still further strengthened when we find him discovering that "Socrates had his rooster," that Newton's little dog Diamond was a cat, and that Munchausen was the real conqueror of the wind mills, the pretended victory over which has brought Don Quixote so much glory. Indeed, what is it that he couldn't expose?

Dr. P. seems curious to know whether or not his valuable contributions had been read before my pamphlet was written, for did they not appear in the papers? Well, now, since he mentions it I can recall having received, sometime ago, a copy of a Nashville paper which, I presume, had reference to this matter. The paper had been mailed as printed matter, but unfolding it, I found *written* on the margin a coarse note, which I supposed was intended to be insulting; a violation at once, both of the postal laws of the country and of what gentlemen everywhere regard as the settled rules of civility and decency.

But, enough of what is personal as between myself and Dr. P., for I suppose the public interest in that, is about equal to what is in the question of whether it is the last quarter or the full of the moon in the planet Saturn.

It is only to prevent injustice to a worthy little woman, who is every inch a lady, and who kindly and frankly affords the fairest opportunity for studying one of the most interesting subjects to-day occupying the minds of men, that one word of this article has been written, or that the "criticism" has been noticed at all.

To show how careful Dr. P. is to be just and fair in bringing the severest charges against one, who as far as he knows and as far as I know, has never done him or other mortal harm, it may suffice to point out a few matters that are susceptible of being tested by the record. He says Mrs. Abbott claims to be thirty-four years old, the record shows that she claims twenty-five. He quotes as a sentence from my pamphlet and in quotation marks, "It may be of interest to know something of the history of this wonderful personage, who, at will sets at naught nature's grandest law." The language does not anywhere appear in the pamphlet. Furthermore, his statements of the methods and language of Mrs. Abbott on the occasion of her exhibitions, do not accord with my own recollections, nor that of any of the gentlemen to whom I have shown his statements.

But the most glaring attempt at injustice of all is the implication that runs through his whole article, that I alone made the investigation and gave out the report contained in the pamphlet. In a weak effort at *double entendre*, Dr. P. says "The Professor asserts himself to have personally tested her, and gravely declares that she is not as other women are." Now the fact is, as stated in the pamphlet, and well proven to Dr. P., the committee that investigated the feats of Mrs. Abbott in the parlors of her hotel, consisted of E. H. Mark, Professor of Physics in the Louisville Male High School, Dr. J. Lewis Howe, Scientist of the Louisville Polytechnic Institute and Professor of Chemistry in the Hospital College of Medicine, Dr. H. A. Cottell, Professor of Chemistry in the Medical Department of the University of Louisville and Editor of the American Practitioner and News, and Dr. John S. Barbour, Professor of Diseases of the Nervous System, in the Hospital Medical College.

The conclusion was unanimous that Mrs. Abbott did fairly and fully everything she proposed to do.

Furthermore, at our suggestion she successfully essayed a number of new tests which she has added to her repertoire, and since exhibited before thousands.

Articles on Mrs. Abbott, much more elaborate than mine, have been written by others, who have made a study of her claims, notably one by Dr. L. G. Pedigo, of Roanoke, Virginia, as part of a report to be made for the British-American Society for Psychical Research, of which he is a member.

"Mrs. Abbott is the greatest fake that ever appeared before an audience," declares Dr. Porter.

Now, the only classic definition of fake, is "one of the circles or windings of a cable or hawser as it lies in a coil." If that is the kind of a "fake" Mrs. Abbott is, there can be little wonder that the transcendent abilities of Dr. Otey J. Porter have to be invoked to prevent her from *roping* in the innocent public. But if the Doctor means to assert that she is what intended to be designated by the term fake, as corrupted from the Hindu "fakir," a begging monk, then he will be required to make oath to having made "a personal test" before the public incredulity can be overcome.

But after all the torture to which I am subjected, the scene of crucifixion is closed by the kindly ministration of some good old cider vinegar on a hyssop. After writing me what, from most men, would be considered a wanton insult, and sending it by mail, disguised as printed matter, after pillorying me before the medical public, Dr. Porter offers, finally, to join me in drumming up a show, in which he is to perform, and I to be the gatekeeper, (I suppose), and, under certain contingencies, to keep all the money I take in; that is unless I take in more than a hundred dollars. I opine there are people in the world who would think they saw in such a proposition, made under the circumstances, an assumption of the existence on his part or mine, of the fattest specimen of white gilled pusillanimity "laid before the medical profession since the days of St. John, or of Hahnemann.'

Proceedings of Societies.

GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE, Md.—January Meeting.

REPORTED BY WM. S. GARDNER, M. D., SECRETARY.

The President, Dr. Henry M. Wilson, in the chair.

Dr. W. P. Chunn related an instance of apparent growth of the placenta after labor.

The patient was 28 years old, and had been married five years. She had had no children at full term, but had had three miscarriages. The first and second miscarriage occurred at about the 4th month of gestation. The last miscarriage occurred about May 10, 1890. She had missed one period, and believed herself to be about six weeks pregnant. On the 10th of May she began to have bearing down pains and hemorrhage, with the expulsion of blood-clots, lasting some three or four days. Then the pain subsided, the hemorrhage ceased, and I regarded the uterus as empty. On the 12th of June, however, she was again seized with violent pains, and, during the night, was delivered of a placental mass larger than a man's fist, which I saw the next morning. The patient, as well as myself, was surprised. The fœtus was searched for, but no signs of it found.

Dr. Thomas A. Ashby: I have seen a somewhat similar case. The patient began to have hemorrhage about the 6th week of gestation. She was not under my care at that time, but I was called in four weeks subsequently, and she was then in the act of throwing off the fœtus. At the time of its removal the fœtus was apparently at the sixth or seventh week of gestation, and partly decomposed. The placenta was not affected by decomposition.

Before I saw her, she had been going around bleeding from

this cause, and was not aware that she was about to abort. She had had five miscarriages between the sixth and eighth week in twenty-eight months, so she stated.

Dr. G. W. Miltenberger: I have known the whole ovum to be retained for months after the death of the fœtus. In a recent case, the contents of the uterus were not thrown off till full term, though the fœtus was dead at the third month.

I cannot understand the growth of the placenta in utero after the death of the child, but I can conceive the growth of the placenta outside the uterus, on account of the peculiar relations of the blood vessels.

Dr. L. E. Neale: I think it is very unfortunate that the specimen is not presented.

The placenta is not developed at the sixth week of pregnancy.

The conditions in extra-uterine pregnancy are very different from those in intra-uterine pregnancy, and what is true of one, regarding placental development, is not true of the other. I see nothing in the history of the case opposed to the belief that it was a very ordinary case of abortion (not miscarriage), with escape of the embryo, and more or less complete retention of the sac, chiefly chorion, that might have been removed by the curette long before it was ultimately expelled.

Dr. L. E. Neale read a paper upon "The Indications for Cæsarean Section."

This paper is intended to stimulate interest in, and discussion of, the subject, cæsarean section *versus* craniotomy on the living child, upon which subject a series of papers will be presented by the members of the Society. It refers particularly to the indications for the section, and is a plea for this operation.

If it serves to arouse interest in examining the pelvis, or increase hesitancy in destroying children, the labor is not in vain.

Craniotomy upon the living fœtus is believed justifiable, but only as a dire necessity, not as an elective procedure, and should not be resorted to where there is a reasonable probability of success by the section, and where the uncoerced consent of the mother can be obtained.

No man is compelled to do craniotomy upon the living fœtus solely upon the choice of the patient or her friends.

In answer to the question "What would you do if the patient

were your wife, your sister, or a near relative?" he believed practically this must be a matter of each man's conscience, over which no dogmatic rule of science can or should have sway.

If seen early enough, the indication of premature labor at the 32nd-34th week, by the method of Krause, who was a very strong antagonist to craniotomy upon the living foetus, the range for this operation should not extend to a conjugata vera below $2\frac{3}{4}$ inches (7 cm.) or to one above $3\frac{1}{2}$ inches (8.75).

The indications for conservative section included all insurmountable obstructions to the delivery of the living and viable child per vias naturales. They include tumors, pelvic exudations, hypertrophic elongation of the cervix, cicatrices, stenoses, tetanus utero falciform, uterine contractions, etc. He believed general opinion placed the limit for the absolute indication at a conjugata vera of $1\frac{1}{2}$ inches or 3.75 cm., and the relative indication extended from that point up to an undetermined conjugata vera measurement, and included many other conditions besides pelvic contractions. Other things being feasible, a $2\frac{1}{2}$ inch, or 6.25 cm., conjugata vera, (Harris), 3 inch, 7.5 cm. conjugata vera, (Lusk) called for section rather than craniotomy, but he warned against relying entirely upon pelvimetry in the relative indication. In contracted pelves, he preferred version to forceps when both were practicable. He insisted upon pelvimetry and briefly outlined the methods. He believed it was chiefly by this means we could determine the indications for the section.

A conjugata vera of 3 inches, 7.5 cm., was generally admitted to be the least through which a living child of normal proportions could pass, and as Lusk maintained, if other diameters were lessened, or the contraction was not limited to the brim, it might require a conjugata vera of $3\frac{1}{2}$ inches, or 8 cm., or more. No hard and fast line could be given, each case must be judged alone. The relative size of the head, its resistance, the past history, the uncoerced consent, the general condition and surroundings of the patient, etc., were all important factors in the relative indication.

The life of the child was not "purely impersonal and scientific," but eminently personal and practical, and he believed the mother should run a reasonable risk in its interest. The life saving of craniotomy could never be as great as that of caesarean section, for it started with a necessary mortality of 50 per cent., or half the

lives at stake. But aside from all argument and comparative statistics, the section was decidedly restricting craniotomy. All deprecate the repeated performance of craniotomy on the same woman. He accepted Carl Braun's rules for the relative indication.

Craniotomy was safer for the mother than section, but piecemeal extraction was equally, if not more, dangerous—ex. 92, conjugata vera $2\frac{1}{2}$ inches 6.25 cm. or less.

If conservative delivery p. v. n. had been attempted and failed, this was a strong point in favor of craniotomy and against the section under these increased dangers.

He strongly deprecated conservative tampering and then resorting to the section. Many lives had been thus sacrificed. If we desire success we must make the section an elective operation, and not a procedure of dire necessity.

Dr. Miltenberger: With regard to the paper of Dr. Neale's, confined, as it is, to the indications for the cæsarean section, there is nothing which I would controvert.

Under the absolute or positive indications, as laid down, there can be no question.

The confusion and discrepancy of opinion have arisen from want of definiteness and clearness as to the relative indications.

If we take the statistics of craniotomy generally, indicating all cases, we get no positive resulting data to guide us.

Where the pelvis is so contracted as to necessitate the piecemeal extraction of the fœtus, it is recognized undoubtedly as the most serious of obstetric operations, and more dangerous than cæsarean section.

Where, on the other hand, craniotomy alone is required, the operation is simple, and the danger to the mother, in proper hands, should not be greater than from the application of the forceps. In my individual experience, on my own patients, I have been obliged to resort to craniotomy but twice in fifty years, and in these as well as those in cases of consultation practice, the mothers have all recovered.

Now, it is just in this latter class that the doubt arises.

The smallest conjugata vera diameter through which a living child has been expelled is 3 inches, or, as has been claimed, $2\frac{3}{4}$ inches, but with this we cannot expect to save the child through

the natural passages. But whether with this or a little more available space, we must recognize the prime and absolute importance, as the Doctor states, of pelvimetry, and to its thorough practical study and application, must we mainly look for increased certainty. Especially does this hold as to internal pelvimetry, the best instrument by far, being the hand of the obstetrlist.

Now, while it is true the measure here of the *conjugata vera* by the finger, may not be perfectly accurate, and we require also to learn the available space in the transverse diameter, yet, with care, it sufficiently approximates the truth for our purpose.

But, on the other hand, as the Doctor has said, we cannot accurately determine the size of the child's head, its degree of ossification, etc. It is true, by bi-manual examination, we can approximate the truth, but not exactly obtain it. I have known an accomplished accoucheur persist for a length of time in the use of forceps before he recognized that he was dealing with a hydrocephalic head. Thus both the factors had elements of uncertainty. It is in just this class of cases that the doubt and uncertainty arises.

When the practical obstetrlist meets with a case of dystocia, from this cause, by internal measurement he satisfies himself, as far as possible, he has 3 inches of available space in the *conjugata vera* or even above this. Without this, a full knowledge of the size of the foetal head, he naturally applies the forceps or proceeds to turn, and not improperly, but if he fails, he has already violated the first fundamental law in *cæsareotomy*, to resort at first to the knife, without any previous operative manipulation. If such manipulation has been at all prolonged, the choice is not between *craniotomy* and *cæsarean section*, but between *craniotomy* and a *Porro*. Fortunately pelves contracted to this extent, are rare in this country, particularly in the higher walks of life.

The operation of *cæsareotomy* is itself sufficiently simple and the modern section is undoubtedly one of the greatest advances in modern obstetrics, while its success constitutes a brilliant epoch in our history. In the hands of those skilled in the technique, and taught and trained by experience, there is every reason to trust and believe that the modern *Saenger* will extend still further its success, and that as an operator gains tact and knowledge with every case with which he deals, and as a part of his success

must depend upon his absolute command of his patient, and her surroundings, it is most likely the old picture will be removed, and with our septic and antiseptic precautions, hospitals will offer a smaller rate of mortality than private practice.

Fully realizing, as I do, the success of the modern Saenger, and the lessened mortality rate which has been achieved, yet, we know that no abdominal section is entirely free from danger, and as I said in these cases of relative indication they may be claimed to be almost if not entirely void of peril with craniotomy.

I do not hesitate to declare that I should prefer, in my own wife, as the safer for her, craniotomy to cæsarean section in such a case, and am therefore bound to extend to others, my patients, the golden rule "do unto others, as I would they should do unto me."

I am therefore forced to the opinion, that cæsarean section will not completely supplant the old operation and that there still remains a field although markedly limited for craniotomy on the living child.

Dr. J. Whitridge Williams: I am sure that all of us are greatly indebted to Dr. Neale for the very clear manner in which he has set forth the indication for the operation, and I almost entirely agree with him.

The indication, I would place at $5\frac{1}{2}$ cm. or 3 inches, and the upper limit for the relative indication at $7\frac{1}{2}$ cm. or 3 inches. Within these limits, unless the child be abnormally small, there should be no question as to the use of the forceps, and the question to be decided whether craniotomy or cæsarean section should be done.

Theoretically, I would choose the section in all cases that appeared favorable, but, practically, I might waive my theory in the case of a primipara who had not been examined previous to labor. For, in that case, it might appear very hard to submit a young woman to such a risk without any previous intimations of her danger.

But if I performed craniotomy under these circumstances, I inform her that in becoming pregnant again she would take the responsibility of the child's life upon herself, and that I would refuse to perforate in subsequent pregnancies.

The mortality of the operation need not dismay us, for Munchmeyer has lately reported the latest statistics of Leopold in which

he reports twenty-eight Saenger operations, with the loss of three mothers and one child, and seven Porro operations with no maternal deaths.

Dr. B. B. Browne: I had a case recently upon which I did *cæsarean* section. She was twenty seven-years of age. Her labor was two years ago when she had convulsions and a craniotomy was done. As a result of injury received at this time, the vagina and uterus sloughed, and there was complete atresia of the vagina. This atresia was afterwards opened up and she become pregnant.

The vagina was contracted by cicatricial bands, and an opening to the right could be felt in the side of the cervix but to the left of the opening was a cup-shaped cavity which might have been the old cervix.

She was not sure of the time of impregnation. She was swollen, and her urine solidified with albumen on heating. Labor pains began Dec. 20th and continued for one or two days, but there was no dilatation. She came to the hospital Dec. 22nd. She had severe uterine contractions that day and came for the purpose of having *cæsarean* section done. But next day the pains had gone. The night of Jan. 1st, the water broke, and severe pains began. The cicatricial bands about the cervix were cut and Elliot's forceps were introduced. Both blades of Tarnier's forceps could not be gotten on. After several efforts I concluded that she could not be delivered in this way.

In the morning the foetal heart was distinct, in the afternoon it was feeble.

The section was made without difficulty. The placenta was attached in front. The child could not be resuscitated. The placenta was readily detached, and the uterus was cleaned out and closed by the Saenger method.

The operation was done Friday, and the patient did well until the following Tuesday, when she sunk rapidly, and died in a few hours.

The woman had grave kidney disease, and had little chance of recovery on that account.

In this case several things are to be considered:

1st, The woman was perfectly willing for the operation.

2nd, Her life, from the condition of her kidneys, was not insurable, and the child had a good chance of living.

3rd, She had much difficulty in the former craniotomy, and barely escaped with her life.

Dr. Ashby: I have had the good fortune to witness two cæsarean sections. One the case of Dr. J. G. Jay of this city, several years ago, and the recent case reported by Dr. Browne. I was impressed with the ease with which the operation can be done. Its mechanical execution is certainly much less difficult than that necessitated by many intra-abdominal operations. Hemorrhage is easily controlled, and the closure of the uterine wound is not a difficult undertaking.

In the case of Dr. Jay, the mother made a prompt recovery, and the child perished simply because of unavoidable delay which was experienced before an attempt at its removal was made. Its death had, in my opinion, no relation to the operation, but to causes which ante-dated the section. I am convinced, in the case of Dr. Browne, the child could have been saved had no other method of delivery been attempted. The section, I think, bore no relation to its death. In this case, the operation was skillfully done, and I am inclined to believe that the mother's death should be assigned chiefly to her kidney complications. She was a bad subject, but bore section well.

My opinion of the cæsarean section is altogether favorable. It has come to stay, and, with an improved technique, and larger experience, will be approached with less hesitation.

The operation of the future will be approached without delay, and before other methods of delivery have been employed.

The important indication for the operation relies upon careful pelvic measurements and determination, in advance, of any obstetric interference of the impossibility of delivery by version or forceps. If this is done, the section will be approached under its most favorable aspects, and its results will be far more satisfactory.

* I agree with Dr. Miltenberger in, that personally, I would prefer craniotomy, if the patient were a member of my own family, but upon scientific grounds I would not hesitate to operate, did my patient and her friends elect this procedure, having satisfied my own mind that a living child could not be born in any other way.

I think it unfortunate that the physician in charge of these cases should not have the moral support of the public, and profession,

in the selection of the section in advance of attempts at other methods of delivery. Out of deference to a sentiment, he often feels forced to use the forceps, and version, where his own judgment was in favor of the section. Valuable time is thus lost, and the lives of both mother and child endangered, if not sacrificed.

Dr. Neale: As no points were raised against the paper, I have nothing to say in its defense. I did examine Dr. Browne's case, and told him, in my opinion, it was no case for the section. The chief obstruction was in the soft parts, that in the pelvis was very slight if any. I thought it possible to deliver the child alive, *p. v. n.*, but was sure it could be readily extracted after craniotomy. Owing to the kidney complication, the mother was in a most unfavorable condition for the section, and, for that matter, the child also; therefore, I advised against this operation.

However, after once beginning a conservative delivery, *p. v. n.*, which was persisted in too long, (30 minutes), I certainly never should have resorted to the section in that case, with both child and mother in the then most unfavorable condition, but would have delivered at once by craniotomy. I totally and emphatically differ from Dr. Ashby that any conscientious obstetrician should ever be forced to resort to craniotomy by the moral suasion of the patient or her friends. Such teaching would be extremely pernicious.

The sentimental question of what one should do if the patient were his wife, etc., is a matter of individual conscience and not open to scientific discussion before a medical society.

I again request the fellows not to let this matter rest where we leave it to-night.

I wish to emphasize the fact that I have purposely avoided the reference to the religious aspect of this question, as I do not believe this process is open for scientific discussion before a medical society.

Selected Articles.

REPORT OF THERAPEUTICS.

ALCOHOL AND ALCOHOLIC SOLUTIONS IN THE ABORTIVE TREATMENT OF HERPES.¹

Dr. D. Dupas, of Lille, gives the following directions for the use of alcohol and alcoholic solutions in the abortive treatment of herpes.

Alcohol of ninety per cent. strength, or a solution of two parts of resorcin to one hundred of alcohol, can be employed as a dressing; or, one per cent. of thymol or three per cent. of menthol in ninety-five per cent. alcohol. If the solutions cause too much pain, a little cocaine may be added. Compresses moistened in one of these solutions are to be applied to the lesions, and over this spread some impermeable material, or absorbent cotton may be used. These dressings must be changed frequently during the day. The herpetic eruption aborts rapidly under this treatment. The element of pain is also subdued, and it is not rare to see rebellious neuralgias from herpes-zoster give way in a few hours to this treatment.

ETHER AS A MENSTRUUM IN MEDICATION OF THE SKIN.²

Dr. Sawyer considers that there are in practice three obstacles to the absorption of a medicine through the skin; namely, the epidermis, the sebaceous secretion of the skin, and the relative insolubility of the drug which is employed in any particular case. The ointments and oily liniments are a better vehicle for the introduction of medicaments through the skin than plasters which have lead-plaster as a basis. After some observation and consid-

1 Journal of Cutaneous and Genito-Urinary Diseases, No. 87.

2 Lancet, July 12, 1890.

eration, ether was thought the best menstruum at our disposal for the solution of many remedies designed for epidermic medication, and after examining a large number of drugs he has selected belladonna, iodine, menthol, and capsicum as suitable for external therapeutic employment in the form of etherial tinctures. He prefers to have the etherial tincture of belladonna made from belladonna root, with camphor, of the same strength as the belladonna liniment of the British Pharmacopœia, using the officinal pure ether in its preparation instead of rectified spirit of wine. To form an etherial tincture of menthol, after many experiments, a strength of one drachm to the ounce was fixed upon. The preparation can be readily applied as a paint to the skin, and is an efficient means of using menthol for local therapeutic effects, especially for the removal of superficial neuralgic pain. It should be lightly painted over the painful part. The quick evaporation of the ether gives a grateful sense of coldness which supplements the analgesic action of the menthol, and allows the easy application of a succession of coats, which leave pure menthol in a finely divided condition upon the skin.

THE ACTION OF SALOL ON THE KIDNEYS.³

This question has recently been investigated by Dr. Hesselbach, from both experimental and clinical standpoints, and the results have a very practical interest. Salol is a drug intended to take the place of quinine and salicylic acid, which was at first recommended as entirely free from noxious properties. Its drawbacks and dangers remained to be discovered by clinical observation. It was first prepared by Von Nencki in 1883, and was introduced into practice by Sahli in 1886. It is the phenylic ether of salicylic acid, and as is well known can be split up into components, phenol, or carbolic acid (some forty per cent.), and salicylic acid (some sixty per cent.), by the pancreatic juice, and to a less extent by the saliva, by the action of bacteria, by organic tissues, and by alkaline carbonates. These components are eliminated from the body, probably as phenyl-ether, sulphuric acid, and salicyluric acid. Its decomposition and elimination from the body take place somewhat rapidly, for half an hour after the administration of thirty grains of salol, salicyluric acid can be de-

³ Practitioner, Nos. 265, 266, 1890.

tected in the urine; but the complete elimination of its components requires a much longer time. For days after its ingestion (in one case five days) the dark green or even blackish tint characteristic of carboluria is observable. The result of this slow excretion is that when salol is given continuously its components are apt to accumulate in the system, and give rise to medicinal and even toxic effects of an enduring kind. The action of salol is doubtless due entirely to the phenol and salicylic acid into which it is broken up, though Sahli surmises from the fat-like chemical character of salol, that in large doses it may be absorbed without decomposition. Even if this were so, however, it is by no means impossible that it would be split up in the tissues if not in the alimentary canal.

There have been, too, opposing views in regard to the risk of using salol, but unquestionable carbolic acid poisoning has been reported as following the use of large doses, and Dr. Hesselbach gives details of a case which terminated fatally.

The patient was a servant, twenty-two years old, stout and somewhat anæmic, with no hereditary disease, and hitherto healthy, except for frequent headaches and swelling of the feet. On May 18, 1888, she was seized with acute articular rheumatism, for which she had salicylate of sodium, which relieved the pain except in the ankle. On June 8th she received 120 grains of salol within eight hours; she became unconscious and died on June 12th. On June 10th, no urine having been passed since June 8th, eight and a half ounces of pale yellow, slightly turbid urine were drawn with a catheter, in this were detected traces of albumin, salicyluric acid and phenol.

The chief changes discovered at the post-mortem examination, which are reported in detail, were in the kidneys. The epithelial changes suggested strongly an acute exacerbation. Inasmuch as the dangerous symptoms which preceded death followed immediately on the ingestion of 120 grains of salol, it seems justifiable to infer that the case was one of salol poisoning, which led to the epithelial changes and ultimately proved fatal.

Why did the salol prove so exceptionally toxic, while in other cases it has shown itself innocuous? Is the salol chargeable with the toxic action, in particular the action on the kidney? Is it the phenol or the salicylic acid, or both of these? A series of experi-

ments was instituted, beginning with an investigation as to the action of phenol on the kidney; this substance being the most apt to produce such changes, and was followed by an investigation of salol and salicylic acid.

The large number of cases of nephritis from carbolic acid which have now been put upon record, prove that the drug is a renal irritant. Although, therefore, there were already numerous data in existence pointing to the action of phenol on the kidney, it appeared necessary to have recourse to experiments in order to discover the way in which the action took place in one and the same species of animal and to compare the resulting microscopic preparations from different species. On examination after death there appeared hyperæmia and œdema of the pia-mater, anæmia of the kidneys, especially of the cortex, and fatty changes (degeneration) in the cortical tissues.

That phenol, apart from its cerebral effects, should chiefly attack the kidney is due to the fact that in this organ its transformation into the innocuous phenol-ether sulphuric acid takes place. That this is so may be inferred from the analogous use of benzoic acid, which is changed into sulphuric acid within the kidney.

The excretion of phenol takes place through the epithelium of the convoluted tubes, and this is damaged in the process, then also its transformation into phenyl-ether sulphuric acid will at least be delayed and act as an irritant. Disease of the kidney, especially of the renal epithelium, must be unfavorable for the elimination of phenol and so constitutes a predisposition to toxic effects when the drug is administered and a contra-indication for its use.

In the next series of experiments salol was administered to rabbits. The microscopic appearances were essentially the same as in those seen in the phenol poisoning, everywhere the fatty degeneration of the epithelium of the convoluted tubules was unmistakable. That salicylic acid frequently gives rise to untoward and dangerous symptoms, especially in relation to the central nervous system, is well known, its action on the kidneys has, however, been less frequently described. Chopin has found that in aged patients it readily gave rise to albuminuria, also in chronic renal disease it acted as a diuretic and increased the albuminuria.

After giving salicylic acid to rabbits the chief thing found in the kidneys on microscopic examination was the existence of hemorrhagic extravasations in the interstitial tissue and the renal tubules, and not a destruction of the epithelial cells. Comparing, then, the renal changes produced by phenol and by salicylic acid respectively, the former, as we have seen, leads to anæmia of the kidney and acute fatty degeneration of the epithelium and of the convoluted tubules; the latter, to hyperæmia of the kidney and hemorrhage into the interstitial tissue and the tubules, followed by comparatively slight epithelial degeneration. Phenol acts primarily on the cortex, attacking the medulla only when given in large doses; salicylic acid affects chiefly the medullary portions, and only when in large quantity extends its action to the cortex,

As regards the lethal doses the comparison is less precise, inasmuch as the mode of action of the two drugs is very different. Six grains of phenol (per pound) in five days proved fatal, while twenty grains of salicylate of sodium (per pound) were necessary to kill, and killed the animal in two days.

These observations appear to make it clear that the renal changes in salol poisoning are chiefly due to the phenol it contains. After the use of salol, anæmia of the kidneys and acute fatty degeneration of the renal epithelium showed themselves; the cortex was the chief seat of the change, the medulla being but little affected, only when the dose of salol was large did distinct traces of hemorrhage appear in the medulla and the medullary rays of the cortex. In other words, only after large doses of salol did the toxic effect of the contained salicylic acid become apparent.

But closer examination shows that the several morbid changes were by no means proportionate to the respective amounts of the two constituents of the salol, whence it may certainly be inferred that not the whole amount of these constituents were concerned in producing the toxic effects observed. Probably a considerable proportion of the salol is absorbed or eliminated undecomposed. Which constituent is the most potent in producing the symptoms of salol poisoning is hard to determine with certainty, as the symptoms produced by the one are not unlike those produced by the other. But even in this respect the action of phenol seems to prevail.

In Dr. Hesselbach's patient contraction of the kidney and the

morbid changes in the secretory mechanism thereby induced, doubtless account for the fatal effect of the forty-seven grains of phenol contained in the salol ingested. Phenol-poisoning may occur much more readily if the renal epithelium is already diseased than if the kidneys are sound. Further, Kuster has observed that phenol, and therefore salol, is especially toxic to anæmic or febrile patients of the female sex, and the death of this patient becomes thus much more intelligible.

The following are Dr. Hesselbach's conclusions: 1. The large proportion of phenol contained in salol renders it so toxic a substance that its unrestricted therapeutic use is fraught with danger; 2. In renal disease, acute or chronic, salol is contradicted.

TREATMENT OF SOME URINARY DISORDERS.⁴

In comparing the various systems of which the human body is built up, such, for instance, as the nervous, respiratory, circulatory, digestive and urinary, the last especially enjoys a condition for the action of drugs which is not equally shared by the other systems, except, perhaps, the digestive system.

Dr. Reginald Harrison devotes a part of a clinical lecture to a consideration of the uses of certain drugs in urinary disorders.

The power of quinine in connection with operations on the urinary organs has long been recognized, and there can be little doubt that this is directly associated with the fact, that it is so largely eliminated by the urine.

Dr. Palmer, of Louisville, Ky., found that he could so sterilize the urine by the administration of boracic acid in ten-grain doses as to prevent the occurrence of urethral fever after such operations on the urethra as internal urethrotomy. The power of sterilizing the urine so as to render it innocuous when placed under conditions where otherwise it would be liable to generate septic influences, is not limited to boracic acid and quinine. Hypophosphate of soda in half-drachm doses, in some purulent affections of the urinary organs may owe its beneficial effects to its influence as a bactericide.

Dr. Harrison has used pichi during four years in the form of a fluid extract, in drachm doses, with considerable benefit. In renal

⁴ The Medical Press, No. 2,671, 1890.

colic and the passing of calculi through the kidneys and along the ureters, attended with hæmaturia ; though not exercising any solvent power, it seems by its action on the tissues in some way to favor the escape of the stone, and thus suppress bleeding; it has been found useful also in the hemorrhage which frequently accompanies cancer of the bladder. The sedative action of the drug on the mucous membrane of the bladder has proved beneficial in many instances of irritability connected with a large postrate. After the bladder has been properly cleansed by irrigation and disinfected, it has been frequently found that the calls to urinate were far less urgent when the pichi was being used.

Acting somewhat similarly, though less astringent in its properties and, therefore, of less value when there is hemorrhage, is an extract prepared from the berries and fruit of the raw palmetto (*serenoa serrulata*); it seems to act something like pareira, and is a good substitute for it.

Of the chemical products, saccharin in half-grain doses is useful in preventing the ammoniacal change in the urine in cases of cystitis, where the mucous membrane of the bladder throws off large quantities of mucus, and the urine undergoes rapid ammoniacal decomposition, the urine may become healthy and acid under the use of saccharin and on discontinuing the drug, the urine will speedily return to its original condition. Hence, it may be found useful in readily providing against conditions which cannot be radically altered. Dr. Thomas Stephenson and Dr. Woolridge have shown that saccharin may be taken for a considerable period without interfering with the digestive or other functions of the body. Another chemical is borocitrate of magnesia, prepared by dissolving a natural borate of magnesia found at Strassfurt, in citric acid. It forms a white powder with a sourish taste and is given in teaspoonful doses in a tumbler of warm water two or three times a day. Its employment has been advocated by Dr. Kochler, in cases of uric acid calculi and gravel. The discharge of these bodies, whose presence has previously been suspected has frequently taken place after the use of this salt. It may be all it does is to secure that the individual shall take at stated times more fluid than perhaps he would otherwise do; an important point, upon which Sir William Roberts has laid stress. Dr. Harrison is disposed to think that it does more than thus induce a

person to flush his kidneys with a bland fluid, by no means disagreeable to taste, and that it is capable of modifying or altering the crystalline form in which uric acid is discharged, and of exercising a solvent power on some kinds of urate stones.

NEW METHODS OF TREATING ERYSIPELAS.⁵

Rosenbach's method consists in washing not only the erysipelatous patch, but the entire neighboring surface, with soap and then bathing daily these patches with five per cent. solution of phenic acid dissolved in absolute alcohol. Very brilliant results are claimed to follow this method, both as regards the course of the disease and the febrile phenomena. Even absolute alcohol is said to produce a favorable action.

In Nolte's method the entire affected surface and surrounding zone are painted twice daily with a mucilage of gum-arabic containing from three to five per cent. of phenic acid.

The method of Koch consists in applying by means of a camel's hair pencil, the following ointment in a thin layer over the affected parts :

Creolin.....	1 part:
Iodoform.....	4 parts.
Lanolin.....	10 parts.

After the ointment is applied it is covered with a thin layer of gutta-percha. This method is said to be especially applicable to erysipelas of the face and of the hairy scalp.

In the method of treatment of Nussbaum and Brumen, ichthyol is employed in collodion.

Hallopeau recommends the use of a solution of one part to twenty of salicylate sodium. Thick cloths are wet with this solution, then applied to the affected parts, and then covered with a layer of rubber cloth so as to prevent evaporation. Almost immediate relief is obtained, and a cure is said to follow on the third to fifth day.

Hunter recommends the injection of carbolic acid into the healthy skin at a distance from the part infected. This method of treatment is extremely painful, and is only applicable in severe cases of the face or hairy scalp.

Dr. Kraske advises making an incision in the healthy skin

⁵ Therapeutic Gazette, No. 10 1890.

around the erysipelatous patch before applying antiseptic substances.

Wolfier makes use of mechanical compression by bandages applied so as to circumscribe the inflamed tissue, while Dr. Kraske proposes elastic rubber bands to accomplish the same effect, where these are applicable.

DEATH FROM A LARGE DOSE OF PARALDEHYDE.⁶

Bridget O'B., twenty years old, was admitted to the fever hospital attached to the Cork work-house, suffering from typhoid fever. Through an oversight on the part of the attendant, she was probably given six or seven drachms of paraldehyde. In about five minutes she fell into an unconscious state, and, despite medical assistance, she died some hours later.

ARISTOL.

(1) Aristol has been used in a pure state in sclerosis and other ulcerations in the male and female genitals. After washing the ulcers with carbolic or sublimate water, the aristol was powdered on and covered with gauze. In ulcers of the glans penis it is necessary to remove the bandage frequently on account of priapism; in those cases iodoform has the advantage over aristol. In syphilitic and indolent ulcers or chancres, the latter acts exceedingly well. Great cleanliness is necessary, especially about the female genitals. In fresh cases aristol has no advantage over iodoform.

(2) Aristol was made use of with the best results in acute otitis media and otorrhœa in place of boracic acid, in lupus laryngis, laryngorrhœa, in ulcerations of the penis, and ulcers of the leg. In burns aristol (with oil or lanolin, ten per cent.) relieved pain and caused rapid cure.

Aristol possesses the advantages of iodoform and can even be used in children with whom iodoform must be used carefully.

Aristol has not a penetrating odor like iodoform.—*Boston Med. and Surg. Journal.*

⁶ Lancet, August 8, 1890.

Editorials, Reviews, Etc.

PUBLISHER'S NOTICE.—The JOURNAL is published in monthly numbers of *Forty-eight pages*, at one dollar a year, to be always paid in advance.

All bills for advertisements to be paid quarterly, after the first insertion of the quarter.

Business communications, remittances by mail, either by money-order, draft, or registered letter, should be sent to the Editor, C. S. BRIGGS, M. D., Cor. Summer and Union Streets, Nashville, Tenn.

All communications for the JOURNAL, books for review, exchanges, etc., should be addressed to the Editor.

COMMENCEMENT EXERCISES OF THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF NASHVILLE AND OF VANDERBILT UNIVERSITY.

The 41st commencement of the Medical Department of the University of Nashville, and the 16th of the Medical Department of Vanderbilt University, was held in Masonic Theatre on the evening of Feb. 27th. The occasion was a most notable and enjoyable one in every respect. The capacious auditorium was packed from pit to dome with a large and fashionable audience. The stage was handsomely decorated with a profusion of plants and flowers. Good music was furnished by the Italian orchestra. On the stage were seated Governor Buchanan, the gentlemen of the Board of Trustees of the University of Nashville, that of the Vanderbilt University, several distinguished members of the Legislature, a number of the prominent physicians of Nashville, the Chancellors of the two Universities, and the Faculty of the Medical Department.

The exercises were opened with an impressive and eloquent prayer by Bishop Hargrove, the President of the Board of Trustees of Vanderbilt. The class valedictorian, Dr. F. M. Williams, of Tennessee, was then introduced, and delivered one of the finest addresses of the kind to which we have ever listened. His subject matter was appropriate, and clothed in plain, unstrained language. The ease of delivery, the impressive gesticulation, and incisive enunciation captivated the audience. It was declared by all a most excellent effort.

The charge to the graduating class was delivered by Prof. Richard Douglas, who signalized the close of his first year's connection with the institution by an address that was characterized by everything that marks the orator. Every word was heard throughout the vast auditorium, and frequent bursts of applause testified to the fact that the speaker and audience were fully *en rapport*. We take pleasure in calling the attention of our readers to Prof. Douglas' address, which is presented in full in another part of the JOURNAL.

In the absence of the venerable Chancellor Garland, of Vanderbilt, Vice-Chancellor Tillett awarded the diplomas to the graduates from that University in a speech remarkable for eloquence, impressiveness, and clearness. His remarks were received with the most respectful attention and were rapturously applauded.

Chancellor W. H. Payne conferred the degrees upon the graduates from the Medical Department of the University of Nashville in Latin.

The following were the recipients of the degrees:

Abernathy, Albert Sidney.....	Tennessee	Bridges, Joseph Gill.....	Tennessee
Adkerson, James Sneed.....	Tennessee	Brock, John B.....	Tennessee
Anderson, Landon B.....	Tennessee	Burns, John W.....	Texas
Argo, Eugene.....	Alabama	Burrow, Reuben C.....	Kentucky
Atchison, Clifton Rodes....	Tennessee	Casey, Thaddeus Alonzo....	Alabama
Ballard, James Clinton.....	Mississippi	Cawthon, Samuel C.	Tennessee
Black, Warner.....	Tennessee	Chism, John Newton.....	Tennessee
Blackman, Alf Hollis.....	Louisiana	Clark, David Wesley.....	Tennessee
Blair, Robert S.....	Arkansas	Cochran, Benjamin C.....	Arkansas
Brackin, Thomas T.....	Tennessee	Conkwright, Sidney A.....	Missouri
Bradford, James A.....	Tennessee	Cooke, Bennett A.....	Kentucky

Cooper, Thomas S.	Missouri	McDowel, Kemper Carlile..	Alabama
Corn, Forrest A.	Arkansas	McKee, James Braxton.....	Virginia
Cox, Shirley Edward.....	Tennessee	McKee, John Creed.....	Virginia
Daniel, William Harris, Jr.	Tennessee	Moore, Ammon Cabler.....	Tennessee
Davis, John Lewis.....	Alabama	Nethery, John Tidwell.....	Tennessee
Donohoo, Philip.....	Arkansas	Noblitt, Boone E.....	Tennessee
Doyle, Henry Avery.....	Tennessee	Outlaw, Frank Calhoun.....	Tennessee
Dunagan, Jos. Thompson...	Alabama	Parker, William Byron	Tennessee
Dunavant, James H.....	Tennessee	Peebles, Joe Hutkinson.....	Tennessee
Dungan, James Forney.....	Virginia	Peerson, James M.	Alabama
Fain, John N.....	Arkansas	Perkins, Isham E.....	Tennessee
Foust, William Daniel.....	Tennessee	Prince, Ephraim L.....	Tennessee
Garrison, Benjamin F.....	Texas	Rains, John L.....	Alabama
Gaston, Alfred Langdon	Alabama	Ramsey, John Bruce	Texas
Gilreath, M.... Alexander...	Georgia	Ray, Herschel Biggerstaff..	Kentucky
Glover, William Henry....	Louisiana	Reeves, Charley E.....	Tennessee
Greene, Augustus A.....	Alabama	Rhyne, William Henry F....	Georgia
Griffin, Robert Lee	Louisiana	Rice, Smith Augustus.....	Texas
Haden, William W.....	Alabama	Richardson, Nich. D. Jr....	Tennessee
Harris, Penumbra Augustus ..	Oregon	Robertson, Thomas Whitfield,	Texas
Harris, William H.....	Tennessee	Ropp, John Marsham	Virginia
Hawkins, Thomas Hardie	Tennessee	Singleton, Oscar G.....	Georgia
Haygood, Atticus G. Jr.....	Alabama	Slaton, Henry Yost.....	Kentucky
Hedgecock, Thompson L....	Alabama	Smith, Richard Fillmore...	Tennessee
Higginson, George.....	Tennessee	Smith, Kirby Hopton ...	N. Carolina
Hinds, Montgomery L.	Alabama	Smith, Thomas Jefferson...	Tennessee
Horn, John Bettis.....	Texas	Stackhouse, Wade.....	S. Carolina
Howser, Stephen Nicholas	Tennessee.	Stewart, Edward Larkin..	Florida
Huddleston, George D.....	Arkansas	Stonestreet, Reginald.....	Tennessee
Hyde, Isaac Newton.....	Tennessee	Tatum, Perry A.....	Louisiana
Hyde, Robert Hatton.....	Tennessee	Thach, Stephen D.	Tennessee
Jenkins, Berry L.....	Texas	Thomas, Leven Beverly.....	Texas
Jenkins, Ed. Monroe.....	Alabama	Turney, Alton J.....	Kentucky
Johnson, James Timothy...	Tennessee	Vaden, Joseph M.....	Tennessee
Johnson, Joel Marion	Texas	Walker, Thomas.....	Indian Territory
Jones, Robert Redding.....	—	Wall, Lee Jackson	S. Carolina
Kendall, Luther.....	Missouri	Walston, John S.....	Alabama
Kimbrough, Walter G.....	Alabama	White, E. Knox.....	Mississippi
Lawson, Thomas G.....	Texas	Willett, William H.....	Tennessee
Laws, Gilford Little.....	Alabama	Williams, Felix M.....	Tennessee
Ligon, James Hutchison...	Alabama	Wilson, Owen Harris.....	Tennessee
Long, Rufus Carroll	N. Carolina	Winchester, Albert Newton	Tennessee
Lumpkin, Walter W.....	Arkansas	Wright, Elbert Logan.....	Tennessee
McClain, George A.....	Tennessee	Young, James Clint	Tennessee
McCrum, Samuel S.....	Texas		

The following were the honors distributed upon this occasion:

Founders' Medal (Vanderbilt)—J. M. Ropp, of Virginia.

Faculty Medal (University of Nashville)—Reginald Stonestreet, of Tennessee.

Dr. S. S. Crockett's Medal in Materia Medica was awarded to J. L. Hedgecock, of Alabama.

Dr. C. L. Eve's Medal in Obstetrics to Reginald Stonestreet, of Tennessee.

Dr. Ambrose Morrison's Medal in Physiology to Wade Stackhouse, of South Carolina.

Dr. George W. Price's Medal in Diseases of the Eye and Ear to Wade Stackhouse, of South Carolina.

Dr. Larkin Smith's Medal in Practice of Medicine to B. L. Jenkins, of Texas.

Dr. Sam'l S. Briggs' First Prize in Surgery to Wade Stackhouse, of South Carolina; Second Prize in Surgery to S. N. Howser, of Tennessee.

Dr. C. H. Robertson's Medal in Gynecology to J. M. Ropp, of Virginia.

Dr. O. J. Porter's Medal in Chemistry to T. W. Robertson, of Texas.

Hospital Interneship was awarded to Wade Stackhouse, of South Carolina.

This closed one of the most successful terms of this prosperous institution. Out of an attendance of three hundred students, diplomas were awarded to one hundred and eleven, and about thirty *ad eundem* degrees were conferred. From the fact that an unusual number of applicants will fail to see their names in the list of graduates of this year, it may be argued that the examinations were this term more rigid than before, and that the Faculty has wisely determined to adopt a policy in the future calculated to raise the standard of medical education.

THE TENNESSEE STATE MEDICAL SOCIETY.

The attention of the profession throughout the state is respectfully directed to the fact that the next meeting of the State Medical Society will be held in this city, April 14th, 15th, and 16th. The active and efficient Secretary is working earnestly to secure an attractive programme, and a large attendance. His notices, with programme of papers, will be mailed March 15th. The af-

fairs of the Society are now in a flourishing condition, and it is earnestly hoped that the enthusiastic interest displayed in the past two or three meetings may be increased at this. It should be considered the duty of every physician in Tennessee to attend the meetings of this Society, and not only lend encouragement by his presence but take an active part in the proceedings. There is no possible reason why our Society should not rank with the best, for the talent of the profession in the state is equal to any.

TO OUR SUBSCRIBERS.

We are pleased to note that the list of delinquent subscribers is growing beautifully less in number as the list of new subscribers grows correspondingly longer. We hope the few delinquents that still remain will lose no time in paying up claims of the JOURNAL, long past due. It is a small matter to you, gentlemen, but much to the JOURNAL. It is gratifying to be able to state that the circulation of the JOURNAL is increasing daily. Let all the friends of the JOURNAL speak a good word for us to physicians of their acquaintance.

Dr. Altman, of South Nashville, at the meeting of the Nashville Academy of Medicine and Surgery, February 19th, read an exceedingly meritorious paper on "Cirrhosis of the Liver," which we hope to publish in a future number of the JOURNAL.

One of the most highly appreciated compliments paid the JOURNAL upon its improved appearance came from the gifted pen of our esteemed *confrere* of the *Southern Practitioner*, who gave us a very flattering notice in the excellent issue of February. Accept thanks, Brother Roberts.

MEHARRY MEDICAL COLLEGE COMMENCEMENT.

The fifteenth anniversary of the Meharry Medical Department, the fifth of the Dental, and the second of the Pharmaceutical Department of Central Tennessee College were held February 19th, at the Masonic Theater.

Notwithstanding the disagreeable condition of the weather, the house was filled to overflowing with citizens of Nashville, alumni, students, and friends of the institution. On the platform were seated the members of the faculty, graduating classes, representatives from the different educational institutions of Nashville, Secretary of the Tennessee State Board of Health, and quite a number of the State Senators and Representatives.

The exercises were opened by an anthem, "Sing unto the Lord," by the college choir, which was followed by a prayer by Rev. D. W. Hays, of Cleveland, Tenn.

The salutatory address was delivered by A. O. Lockhart, of Georgia. After a few words of welcome, he gave a carefully prepared thesis on "Histology." This was followed by an address on "Accuracy in Preparing Prescriptions," by J. M. Beverly, of Galveston, Texas, who was elected by his class as pharmaceutical valedictorian.

The medical valedictory was delivered by O. C. Queen, of Texas, his subject being "Phthisis Pulmonalis."

Dr. N. G. Tucker delivered the charge to the medical graduates, and Dr. G. W. Hubbard addressed the graduating class in pharmacy. President Braden then conferred the degree of M.D. on thirteen young men, and one received the degree of D.D.S., while three others received diplomas certifying that they had completed the pharmaceutical course of study.

Dr. R. O. Tucker's prize for excellence in obstetrics was awarded to O. C. Queen, of Texas, who also received a gold half-eagle, offered by Dr. W. A. Sinclair, of Washington City, who

is a member of the class of '87, for the highest standing in all the branches of the senior year.

The past session is conceded to have been the most prosperous known in the history of Meharry. Eighty medical, five dental and nine pharmaceutical students have been enrolled this session. For the first time since its foundation, the students have enjoyed clinical advantages at the City Hospital.

More than one-half of the educated colored physicians of the Southern States are graduates from Meharry College. With scarcely an exception, they have been cordially received by the white physicians, who have consulted with them in dangerous cases, and assisted in difficult surgical operations.

Dr. James A. Lydston, late Chief of Eye and Ear Department of the Pension Bureau, Washington, D. C., and Professor of Chemistry in the Chicago College of Physicians and Surgeons, has removed to Denver, Col., where he will re-enter the practice of his specialty. His change of location has been necessitated by the illness of his wife.

Dr. Benjamin Lee, Secretary of the State Board of Health of Pennsylvania, has accepted the position of Secretary of the Section on State Medicine of the American Medical Association. As the meeting takes place in Washington, May 5th, it is important that all papers intended for this section should be in his hands by April 5th. All members of the association desiring to be enrolled in the section are requested to forward him their names at 1532 Pine Street, Philadelphia.

We regret that "Extracts from Home and Foreign Journals" have been again crowded out of the JOURNAL. This important department will receive the most careful attention hereafter.

A consignment of Koch's lymph, which had been forwarded from Berlin on February 6th, and apparently mislaid in the New York Custom-house for a week or two after arrival, was finally delivered to Messrs. Lehn & Fink, wholesale druggists, 128 William Street, New York, on Saturday afternoon, February 28th. This firm has spent several hundred dollars in cablegrams during the period since the first announcement of the lymph discovery to date, with the result that they have now secured sixty vials of five grammes each. A five gramme vial is diluted to a one-tenth of one per cent. solution, and furnishes 5,000 injections. The vials are sealed, containing the reddish brown syrupy liquid, which foams on shaking, and each vial is accompanied by explicit directions and caution over the printed signature of Dr. Libbretz. It is assumed that this consignment is the first imported into this country for commercial purposes. Messrs. Lehn & Fink sell the lymph only in the original five-grammes vials, preferring thus to guard originality to the physician.

The short-hand notes of Professor Atchison's lecture on Hypnotism, which was promised our readers to appear in this issue, were inadvertently destroyed, and the appearance of the article is necessarily deferred.

OBITUARY—DR. JOHN P. McFARLAND.

At a meeting of the Nashville Academy of Medicine held at their hall, Tuesday evening, Feb. 17th, to take action in regard to the death of Dr. JOHN P. McFARLAND, which occurred at Lebanon, Tenn., on the day preceding, the Academy was called to order by Dr. James B. Stephens, President, who briefly stated the occasion, and paid an eloquent tribute to the deceased.

Of the large attendance present, Drs. Haggard, Mitchell,

Douglas, White, and others, in appropriate remarks, gave evidence of the high esteem held for the deceased.

A committee being appointed by the President, submitted the following preamble and resolutions, which were unanimously adopted:

The life of Dr. JOHN P. MCFARLAND was eventful only so far as the daily discharge of the duties incident to the practice of his profession served to make it so. Born in Henry County, a little more than 45 years ago, and deprived in early infancy of a father's care and counsel, he was in the best and truest sense a self-made man. Enabled to acquire only an ordinary English education before the outbreak of civil war closed the doors of schools and stilled the arts of peace, he responded promptly to his country's call and faithfully followed its flag, as a private soldier, to the woeful ending. Hereditary and natural inclination combined to make him a physician; so that, when he found himself, at the close of the war between the states, dependent on his own exertions for a livelihood, his choice of a life-career was made with no debate and almost without volition. After a preliminary course of study at Lebanon, under the tutelage of that eminent and beloved master, the late Dr. Edward Donoho, he attended his first course of lectures at the University of Nashville, and a summer and winter course subsequently at Jefferson Medical College. Having been graduated by the latter institution in March, 1868, he at once engaged in the practice of his profession—first at Nashville, then at Lebanon, afterwards in Missouri, and finally in this city again. During all this time, except when for a brief period the threatened breaking down of his health compelled him to seek relaxation in travel, he was actively engaged in the practice of his profession. Loving it as his chosen life-work, and revering it as one of the sublimest of human vocations, he brought to the discharge of his multiform duties a mental equipment which at once compelled success. His mind was essentially and eminently analytical; his judgment acute and usually unerring, so that, while highly successful as a general practitioner, as a diagnostician he was probably unsurpassed by any man of his years in Tennessee.

It was necessary to know and to understand him to love him, and it is no mean tribute to his memory that they who knew him best loved him most. Those who penetrated the husk of an often ungentle and sometimes seemingly ungracious demeanor, found beneath the golden grain of a noble nature and a sterling soul.

It is manifestly impossible, in the necessarily conscribed limits of a paper of this nature, properly to put into words an adequate estimate of the character of Dr. McFarland. We knew him, and we loved him; he has left us, and we mourn him. His companionship was a perennial pleasure; his life, filled with kindly deeds and gentle ministration, is an object-lesson to us all; his memory amongst us will be a benediction.

Your committee, deeming it proper that this Academy, of which he was an honored member, should make a formal record of his death and offer a tribute to his memory, ask the adoption of the following;

Resolved, That we recognize in our late friend and associate, John Porter McFarland, M.D., a devoted, earnest, careful and accomplished physician, well endowed by nature, possessed of more than ordinary attainments, ambitious in his vocation, fortunate in his social relations, and zealous in the discharge of the arduous duties of his calling. Although not possessed of great physical strength, yet in his moral and professional constitution, and in his stand for truth and right, he always manifested the strength of a genuine and well-developed manhood, and his strict views of professional

integrity always rejected any creed or practice that did not tend to the betterment of his fellow-man. He was true to his friends, steadfast to the right, and an uncompromising foe of wrong.

"He was a man
That lived up to the standard of his honor,
And prized the jewel more than mines of wealth."

Resolved, That, by the death of Dr. John P. McFarland, the Nashville Academy of Medicine has lost one of its most efficient, earnest and honorable members, who, by his kind and courteous manner, his earnestness for the good of the profession and of mankind, has endeared himself to the entire membership.

Resolved, That we tender to his wife and family assurances of our sincere and profound sympathy.

Resolved, That this memorial be enrolled on our records, and that a copy be furnished the family, and also the medical journals of this city for publication.

DEERING J. ROBERTS, M.D.,
J. D. PLUNKETT, M.D.,
J. R. BUIST, M.D.,
R. L. C. WHITE, M.D.,
J. R. HARWELL, M.D.,
W. D. HAGGARD, M.D.,
Committee.

BOOK NOTICES.

AUSCULTATION AND PERCUSSION. By FREDERICK C. SHATTUCK, M.D., Professor of Clinical Medicine in Harvard University; Visiting Physician Massachusetts General Hospital, etc. 1890. George S. Davis, Detroit, Mich.

This number of the PHYSICIAN'S LEISURE LIBRARY series is a most excellent manual for the use of physicians and students, who desire to familiarize themselves with the methods of examination by auscultation and percussion.

The little treatise possesses many points of excellence. The plates are numerous and good. The subject matter is clear and concise. The deductions and explanations are brief and clearly intelligible. A point worthy of the attention of physicians in general is the remarkable cheapness with which such valuable reading-matter is offered by this enterprising publisher. Every physician should avail himself of the chance offered to obtain the various volumes of the Leisure Library.

TEXT-BOOK OF MATERIA MEDICA FOR NURSES. Compiled by LAVINIA L. Dock, Graduate of Bellevue Training School for Nurses; Supt. of

Grace Memorial House. G. P. Putnam's Sons, New York, 27 West Twenty-Third Street. London, 27 King William Street Strand. The Knickerbocker Press. 1890.

This little work will surely fill an important place. It is a text-book for nurses, and, therefore, treats of *materia medica* alone to the exclusion of therapeutics. Nurses have to do with the former, but not with the latter. The author has shown good judgment and discrimination in the selection and arrangement of the text, and we feel satisfied that it will meet a long-felt want. The avocation of the nurse is gradually growing in importance, and such valuable works as this deserve to be encouraged.

? QUIZ-COMPENDS? No. 14.—A COMPEND OF DISEASES OF CHILDREN, Especially Adapted for the Use of Medical Students. By MARCUS P. HATFIELD, A. M., M. D., Professor of Diseases of Children, Chicago Medical College, Physician to Wesley Hospital, etc., with a Colored Plate. Philadelphia: P. Blakiston, Son & Co., No. 1012 Walnut Street. 1890.

The great utility of Quiz-Compend is undoubted. Students especially should be brought to appreciate the material assistance such manuals afford in reading up lectures and in preparing for examination. This particular number is especially excellent in arrangement of subjects, and the clearness with which they are treated. It is based upon Dr. Korman's "*Compendium der Kinderkrankheiten*." We take great pleasure in commending this little work to students and practitioners.

HEREDITY, HEALTH AND PERSONAL BEAUTY. By JOHN V. SHOEMAKER, A. M., M. D., Professor of *Materia Medica*, Pharmacology, Therapeutics and Clinical Medicine, and Clinical Professor of Diseases of the Skin in the Medico-Chirurgical College of Philadelphia; Physician to the Medico-Chirurgical Hospital; Member of the American Medical Association, of the Pennsylvania and Minnesota State Medical Societies, the American Academy of Medicine, the British Medical Association; Fellow of the Medical Society of London, Etc. Philadelphia and London: F. A. Davis, Publisher. 1890.

This work, by a very well-known medical author, is written rather for the general public than for the professional reader, and yet it contains much that will prove both instructive and interesting to the latter. The work displays on the part of the author careful and extensive research, a remarkable fund of general in-

formation, and a most admirable tact for presenting the same in the most attractive style. The book deserves to become popular, and its title "Heredity, Health and Personal Beauty," is, to say the least, a taking subject. The physician may derive great pleasure from a perusal of the work, and may gain much that will prove of use to him in his practice.

A PRACTICAL TREATISE ON FRACTURES AND DISLOCATIONS. By FRANK HASTINGS HAMILTON, A.B., A.M., M.D., LL.D., Late Professor of Surgery in Bellevue Hospital Medical College, and Surgeon to Bellevue Hospital, New York; Consulting Surgeon to Hospital for Ruptured and Crippled, to St. Elizabeth's Hospital, etc.; Author of a Treatise on Military Surgery and Hygiene, a Treatise on the Principles and Practice of Surgery, etc. Eighth Edition, Revised and Edited by STEPHEN SMITH, A.M., M.D., Professor of Clinical Surgery in the University of the City of New York, and Surgeon to Bellevue and St. Vincent Hospitals, New York. Illustrated with Five Hundred and Seven Wood-cuts. Philadelphia: Lea Brothers & Co. 1891.

Hamilton's Treatise on Fractures and Dislocations is the greatest text-book on a surgical subject that has ever been issued from the American press. It stands to-day without a peer as a model text-book. The great appreciation in which it is held abroad, as well as at home, is attested by the fact that no American or English work has been translated in so many foreign languages. It is accepted the world over as an authority upon the subject of fractures and dislocations. Although, from time to time, various treatises upon the same subjects have appeared before the profession, Hamilton's work still maintains its *prestige*, and is even more popular to-day than before. As a systematic, comprehensive and exhaustive text-book it has no equal.

The treatise is now presented in its eighth edition, carefully revised and improved, by the distinguished pupil of the distinguished author, Dr. Stephen Smith, of New York. The mere announcement that Dr. Smith is the editor of the present edition is full guarantee that the work has been brought fully abreast with the times. The text has been rendered more compact, new facts, cases and opinions added, and many new illustrations, all of which serve to render the work even more practical and useful than before. No physician can afford to be without this classical work.

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C. S. BRIGGS, M. D., EDITOR.

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Original Communications.

UTERINE FIBROMA.*

BY J. B. MURFREE, A.M., M.D., MURFREESBORO, TENN.

After a resume of the laws of nutrition and waste in the human system, and defining the excess of tissue deposit as a morbid growth, which may occur in any part of the body, Dr. Murfree takes up the consideration of these morbid growths as they occur in the uterus. He says: "The beautiful mistletoe which springs from the towering oak, though its seed may have come from afar, yet lives and grows from the sap of the tree; so with a fibroid tumor of the uterus, though some latent cause may have started its existence, yet it is fed by the same blood that supplies the normal tissues, and grows under the same law.

Uterine fibroma are not malignant, but it is a question in gynecology whether by some degenerative process they may not be-

*Abstract of a very valuable paper read before the Tri-State Medical Society at Chattanooga, Oct. 15, 1890.

come cancerous. Emmet favors this view, while Thomas denies that a fibroma becomes malignant.

The determinate direction of a fibroid tumor has led to their classification as, interstitial fibroma, subperitoneal fibroid, and submucous fibroid. The prognosis of uterine fibroid is generally favorable. While they are the most frequent of all the neoplastic growths of the uterus and are the fruitful source of much physical and mental suffering, they are perhaps the most innocent as regards a fatal issue. By their pressure upon the organs of the pelvis and abdomen, the frequent and profuse hemorrhage they occasion, by the poisoning of the general system from their degeneration they do sometimes cause death. But they often continue to grow until the menopause, when, with the atrophying of the uterus, they become innocuous, and sometimes entirely disappear. Hence they threaten life; first, by hemorrhage; second, by inflammation; third, by septicæmia; fourth, by pressure.

Bleeding is a constant symptom in uterine fibroma. The size of the growth, however, does not influence the severity or frequency of the hemorrhage. It is the situation, rather than the size of the tumor, being most severe in the submucous varieties; next, the interstitial; and, last, the subperitoneal. Pain is a vague symptom, usually located in the region of the uterus, frequently referred to the back, it is not often severe or persistent, and is more often present in the submucous variety, and least so in the interstitial.

The symptoms caused by the pressure of the enlarged uterus upon the adjacent organs may be regarded the same as those caused by mechanical irritation, constipation and hemorrhoidal tumors. The bladder may become disturbed in its functions, rendering urination frequent and difficult. The tumor pressing on the ureters may interrupt the flow of urine and produce disastrous consequences in the kidneys. Finally, the womb may ascend above the brim of the pelvis because of the increased size of the tumor, and, pressing the stomach and diaphragm, materially interfere with digestion and respiration.

The constitutional symptoms are the result of the loss of blood, the disturbance of the nutrient functions and the undue irritation of the nerve centres. These are suggestive but not conclusive. The physical signs are what must be relied upon in making a

diagnosis. They are : Enlargement of the uterus with displacement, and irregular or nodular surfaces with increased density. The diagnosis is usually not difficult. Uterine fibroma must be differentiated from uterine displacements, pregnancy, hæmatocele, cellulitis and ovarian tumors. When a fibroma is associated with pregnancy the diagnosis is greatly embarrassed. A small fibroid tumor projecting from the uterus may be mistaken for an inversion, but the passage of a probe will determine the diagnosis.

The treatment of uterine fibroma is first symptomatic. For the prevention and checking of the hemorrhage, which is the principal symptom, the best means are position, quietude, the hot douche, astringents and opiates. Many internal remedies are recommended but few, if any, are reliable. Local treatment consists in application of cold externally, injections of astringents and styptic medicines, compression, dilatation and incision of the os, the hot douche and the tampon. The best remedies are the application of the tincture of iodine to the interior of the uterus, the hot water douche and the tamponing of the vagina with cotton saturated with a solution of alum.

Second, The general treatment by the internal administration of medicines. This plan is intended to be curative and many medicines have been vaunted as being capable of causing absorption or expulsion of the foreign growth. Among these are hydrarg. bichloride, chloride of calcium, the iodides, bromides and ergot. The majority of the medical profession have no faith in medicine as being capable of affecting the absorption or expulsion of a fibroid tumor.

Third, The surgical treatment. The surgical means may be said to include traction, torsion, enucleation, excision, ecrasement, electrolysis, and hysterectomy. All these methods have been successfully used and each has its particular advantages. The ecraseur however is more generally used for the removal of submucous fibroids that are pedunculated, yet, excision with the scissors in this condition is equally as safe and more satisfactory.

The ecraseur is safe as a general rule, yet, there are objections to its use. Owing to the remote situation of the tumor it is sometimes very difficult to apply the chain or wire so as to include the whole tumor, and when applied satisfactorily, if the tumor be

large the chain or wire may break before the operation is completed.

“One cardinal rule is to be observed in treatment of these fibrous growths, nothing must be done to destroy the vitality of the tumor while in situ, since the case is then burdened with the extra risk of blood-poisoning.” In the removal of a uterine fibroma, with a broad base, a part of the uterus may be accidentally included within a loop of the ecraseur, as has happened.

For the relief of small fibroid growths of the uterus that bleed freely and are inaccessible, the removal of the ovaries, viz: Battey’s operation is indicated.

Electrolysis has been used with good results and is especially adapted to the interstitial variety. Removal by laparotomy is the recognized operation in the sub-peritoneal variety when the tumor is pedunculated, and has grown so large as to be irritating to the abdominal walls.

Hysterectomy is particularly indicated in large and growing tumors of the uterus, where such a size has been attained as to be burdensome to the woman and life is threatened.

Hysterectomy is not, however, to be performed as the ideal operation, but only resorted to in order to save the life of the patient as a forlorn hope.

A CASE OF PLACENTA PREVIA.

REPORTED BY C. L. LEWIS, JR., M.D.,

Professor of Physiology in the Tennessee Medical College, Knoxville, Tenn., and formerly House Surgeon Bellevue Hospital, N. Y.

On the night of February 19th, I received a "hurry call" to the house of a laborer, some two miles from the city. On my way, the messenger told me that his wife was bleeding to death. Upon enquiry, I found that she had given birth to three children, all at the 7th month. That her mother had given birth to her at 7 months, and that the patient was now in her 6½th month. Everything went well until five weeks ago, when she had a hemorrhage from the uterus. The physician who attended her, thinking an abortion imminent, gave her remedies accordingly, and succeeding in his efforts, paid no further attention to her. About ten days ago she had another hemorrhage, which was promptly checked by the same remedies. She had retired about 9 o'clock, but was awakened at 10 by a serious flooding.

Upon my arrival I found Mrs. C. lying in a pool of clotted blood. She was very pale; pupils dilated; pulse slow, large and compressible; skin cold and covered with a clammy sweat. At intervals she asked for water. Examination per vaginam showed os occluded by a boggy mass of firmer consistency than the surrounding clots of blood. I saw that immediate action must be taken, as the hemorrhage was still continuing, the blood being ejected in gushes.

Taking a hypodermic syringe I gave her an injection of

Ext. ergot fl.	} āā 5j.
Whisky.	

Oiling my hand with vaseline, I introduced it well up in the vagina, and, with my forefinger, I dissected the placenta from the

uterus, this being accompanied by a serious hemorrhage. The very instant I finished, the hemorrhage ceased, and the bag of waters descending well into the vagina, I left the case to nature. In due course of time the bag ruptured. Examination now showed placenta in vagina. In 15 or 20 minutes, the uterus contracting well, the placenta presented at ostium vaginæ. No teasing could move it, so, waiting about 20 minutes, the woman gave two superb efforts and expelled a dead foetus, weighing five pounds, length of cord thirteen inches. This latter accounts for my inability to move the placenta. Grasping the uterus through the abdominal walls, I used "massage" for twenty minutes, after which I applied an abdominal binder.

February 24th.—Patient has done remarkably well. She has been taking ergot ʒj t. d., and has had no further trouble whatsoever.

ELECTRICITY—WHEN OF POSITIVE SERVICE TO THE GYNECOLOGIST.

BY ANDREW F. CURRIER, M.D., OF NEW YORK.

The following is an abstract of a paper read before the Academy of medicine in New York, Jan. 21, 1891.

The testimony upon this subject is conflicting. Some have opposed it from prejudice and bias, and others have advocated it with an enthusiasm which revealed indiscretion and unwisdom. Satisfactory knowledge can be gained only by experience, and this necessitates no little expense for the apparatus, and time and labor, in order to comprehend the physical laws governing electricity. As in religion, science, art and politics, success as a rule only comes to those who follow up the subject persistently and thoroughly. The patient must also submit to such conditions as will permit a fair test of the agent. The subject is considered under these headings: *a*—Necessary outlay and apparatus. *b*—Indications. *c*—Contra-Indications, Cautions and Objections.

The faradic current is indicated when increased muscular tone or contractile force is desired. Incidentally will come improved vascularity and nerve energy. The galvanic current is indicated as an astringent, hæmostatic demetrient, admetrient or sedative. For some conditions, for example pain, either current may be effective. All battery currents are based upon Ohm's law, that is, that the available battery force equals the entire force generated by all the cells, divided by the resistance offered by the wires, the fluid in the cells, in fact everything which hinders the passage of the current. The unit of usable current in electro-therapeutics is the milliampere.

The requirements for a faradic battery are that it shall be small,

simple, clean and cheap. Gaiffe's costs but a few dollars, and is perhaps the best there is. The requirements for a galvanic battery are, steadiness of current, cleanliness, simplicity of construction and durability. The writer has never found a portable battery which answered these requirements, but does not assert that they do not exist. To answer the conditions mentioned, there should be a large number of large cells in continuous connection. Either the Law or the Leclanche cells will give satisfaction, the former being more cleanly and more durable. A rheostat and a milliamperemeter are indispensable, and the writer is well pleased with the Bailey rheostat and the Barrett meter, graduated to 250. The connecting cords from battery to patient should be long enough to allow the patient to be moved about without danger of breaking the circuit and giving shock. For an abdominal electrode, Martin's is the best. There are many varieties of uterine and vaginal electrodes, those designed by Apostoli being very good ones. The writer has designed one of aluminium with a cylindrical, removable platinum tip, the shaft being covered with a thin rubber tubing. It is light, cheap and flexible. The rheostat and meter may rest upon a portable base furnished with suitable binding posts and switch for changing polarity. The character and effect of the current at the two poles is essentially different. The positive pole will check hemorrhage and glandular secretions, the negative will not. The positive pole will corrode all but the noble metals, the negative will not. The positive pole is acid, the negative alkaline. At the positive pole oxygen is liberated in the electrolysis of water, at the negative hydrogen. The writer's paper contains an analysis of 23 cases in which the indications for treatment were: (1) Pain. (2) Hemorrhage. (3) Inflammatory Exudate. (4) (Sterility.) (5) Dysmenorrhœa. (6) Super-secretion. (7) Hysteria. (8) Uterine sub-involution. (9) Uterine sub-nutrition.

For pain, the positive pole should be within the uterus or vagina, and a weak current is better than a strong one. A good average is 30 milliamperes used from 4 to 8 minutes. The intervals of applications should depend upon the duration of the periods in which pain is absent. Pain was relieved in two cases in which it persisted after removal of the uterine adnexa, in one each of uterine myoma, pyo-salpinx with ovarian apoplexy, and

endometritis, and two of pelvic peritonitis with exudation. For hemorrhage, the positive pole is believed to be unsurpassed. It was used in a case of interstitial myoma, and in one of malignant disease of the uterus and omentum. Four cases were treated for inflammatory exudate, and in three the exudate was disintegrated and absorbed. But as the diseased organs which had been confined by it became more mobile they also became larger and more sensitive. In five cases sterility was treated with the faradic current. Impregnation and delivery resulted in two. Dysmenorrhœa may be relieved by either the positive galvanic pole or by faradism. Three cases are narrated, but only in one was the result decidedly favorable. For super-secretion, the positive pole is preferable to the powerful caustics and escharotics and yielded good results in three cases. In two cases hysterical symptoms were much modified in addition to benefit which was derived for more palpable lesions. Sub-involution was successfully treated in one case, the uterus contracting firmly upon the bi-polar electrode of Apostoli, and with the faradic currents. Uterine sub-nutrition, in connection with hard ante-flexed uteri, and usually associated with amenorrhœa, dysmenorrhœa or sterility, will be benefitted by the faradic current. Five cases were treated and all but one received positive benefit. Under the head of cautions, contra-indications and objections, nausea resulted in one case, and a similar observation has frequently been made by others. The passage of the galvanic current may cause faintness, which may be slight or profound, and dizziness. In a case of exophthalmic goitre, with rapid heart action, collapse was imminent on two occasions. An irritable heart, such as is usually present in the last mentioned disease, and with certain chronic gastric disorders, contra-indicate the use of electricity. Malignant disease within the abdomen is a contra-indication, or at least proved so in one case. Small dry electrodes should not be applied to the abdomen, but large wet ones. The former will occasionally produce burning. The method of rapid reversals of the galvanic current is of limited usefulness and should not be used with nervous women. The shocks may be exceedingly harmful. The electro-puncture of the fibroid tumor means possible sepsis with its consequences. If it is electricity, and not inflammation and sloughing which reduce the nutrition of a tumor, it would seem to be unnecessary. Galvano-cauterization

of the uterine mucous membrane seems to furnish the advantages of puncture without its danger. Electro-puncture is also disapproved for hæmatoma and hæmatocele as dangerous, tedious and inefficient as to its results. Electricity is the handmaid and not the mistress of surgery—a valuable assistant, and increasing in value with experience, but one which demands rational, careful and intelligent use.

TRENDELENBERG'S FLEXIBLE DRESSING.

Professor Trendelenberg has been using at his clinic a gelatin paste, recommended by Unna, that is designed to be substituted in those cases where flexible collodion or india rubber solution have been employed. It will hold dressings in place while permitting free motion of the parts. It is not friable or very stiff, and is not so adherent to the cuticle as to interfere with the excretory functions of the skin. It therefore does not cause the peeling off of the upper layers of the epidermis, upon being removed, and the tendency to eczema in consequence. It is prepared in two degrees of consistence. The thick paste contains gelatin, glycerine and water, each thirty parts, with oxide of zinc ten parts. The thin paste has gelatin twenty parts, glycerine thirty, water forty, with oxide of zinc ten parts. Heat is necessary when the pastes are compounded; it is also needed to liquify them when they are used. The pastes are readily removed with warm water. —*Jour. A. M. A.*

Proceedings of Societies.

THE CLINICAL SOCIETY OF LOUISVILLE.

· STATED MEETING, JANUARY 13, 1891; THOS. P. SATTERWHITE,
M.D., PRESIDENT, IN THE CHAIR.

Dr. L. S. McMurtry presented a specimen from a case of extra-uterine pregnancy, with the following history:

Mrs. S. E. M., age twenty-seven years, married nine years. Eight years ago she suffered an abortion at three months, has had uterine disease ever since, and has been sterile. She missed the menstrual period in November, and on December 7th called to see her physician, Dr. George W. Griffiths. Her complaints were of general abdominal pain and discomfort. She again called on Dr. Griffiths on December 11th. On the 13th, two days later, she had a violent paroxysm of pelvic pain localized on the right side. Dr. Griffiths saw her soon afterwards and administered a dose of morphia. She was relieved for the time. On the evening of the 18th Dr. Griffiths summoned me to meet him in consultation, and expressed the belief that abdominal section was indicated. The abdomen was swollen and tender with increasing peritonitis. There was a bloody flow from the uterus. The patient was pallid as from post-partum hemorrhage. Vaginal examination showed uterus pushed to the left side and the pelvis choked with effusion. The pulse was 134, small, the pulse of hemorrhage. The bowels had not acted for four days. We gave an energetic purgative, and arranged for operation the following morning.

“Early on the morning of the 19th I opened the abdomen. Dr. J. W. Guest gave ether and Dr. Griffiths assisting. On opening the peritoneum a large quantity of blood flowed out over the

table. More than a gallon of blood-clot was removed. The fetal ball was on the right side. The right appendage was tied off close to the uterus, the cavity irrigated with warm distilled water, a drainage tube placed, and the abdomen closed. When put on the table the pulse was 140 and quite feeble. The appendage on the opposite side was not removed, as I feared to prolong the operation. The operation was concluded in thirty minutes.

"The specimen is of great interest. You will recognize here the ovary, and here the ruptured fallopian tube and the fetal envelopes. From this poured the fearful hemorrhage, which invariably ends in death if not arrested by surgical interference.

"This is the first case of extra-uterine pregnancy, so far as I can learn, operated upon in Louisville by abdominal section at the time of rupture. The success of the case is due to Dr. Griffiths' recognition of the gravity of the situation, and advice for immediate operation.

"Ectopic gestation is a very common accident. Hundreds of women perish annually from this cause because it is not recognized. Dr. Formad, the well-known pathologist of the University of Pennsylvania, as coroner's physician for Philadelphia, states that in one year he found post-mortem nineteen cases of ruptured ectopic pregnancy unrecognized. The symptoms are those of shock, internal hemorrhage and peritonitis. The patients exhibit a history of sterility and peri-uterine inflammation. The fertilization of the ovum in the fallopian tube is due to a desquamated salpingitis by which the lining of the tube is deprived of its ciliary epithelium. Extra-uterine pregnancy is almost invariably tubal. The tube ruptures about the twelfth week. It may rupture through the free surface of the periphery of the tube directly into the peritoneum, as in the specimen here presented. This is a deadly accident, if the hemorrhage is not arrested by surgical means. The rupture may occur in the portion of the tube included between the folds of the broad ligament, allowing the fetal structures to escape into the cavity of the broad ligament. These latter are the cases of extra-uterine pregnancy which go on to a viable period. Extra-uterine pregnancy until very recently was not understood in its pathology, and was classified and treated as accidental hemorrhage, hematocle, etc. It is now well known that in most cases of hematocele, so-called, are in reality cases of

ectopic pregnancy. The treatment in all cases should be immediate abdominal section. The uterine appendages of both sides should be removed, inasmuch as the predisposing salpingitis is symmetrical. I have now operated in three cases within the last two years for ruptured tubal pregnancy, and all have recovered. The only safety in such a condition is immediate operation. The diagnosis before rupture is practically impossible. When the rupture occurs the indications for surgical interference are as positive as in treating a wound of the brachial artery."

Dr. Geo. W. Griffiths: "I can add very little to the history as already detailed. As soon as the symptoms of shock and hemorrhage appeared I advised operation. I have witnessed a great many bloody operations, and in my work as a railroad surgeon have seen many severe accidents, but I must say that when the abdomen was opened in this case and the blood gushed out it was the most formidable operation I have ever seen. I saw the patient to-day and she is entirely healed and well, though she is pale from the severe loss of blood. She went out to the table and ate with the family to-day for the first time, three weeks after the operation."

Dr. I. N. Bloom; "Had the symptoms been more pronounced the night you first saw her would you not have operated immediately?"

Dr. McMurtry: "Operation would have been immediately done had the diagnosis been absolutely positive. That is, of course, impossible before the abdomen is opened."

Dr. J. A. Ouchterlony: "I do not know when I have seen a specimen and heard a report so interesting and of such great practical importance as this. It brings vividly to my mind a number of cases I have seen during the past thirty years, which were diagnosed by myself and others with whom I was associated as pelvic hematocele, and at the same time there was always something inadequate in the diagnosis, and it seemed incomprehensible why there should be such terrific hemorrhage and such profound shock. It is a great satisfaction to know that light has been shed upon this important and perilous condition, and that we can predicate accurately the pathological condition. Cases that formerly were considered to be cases of hematocele are now known to be ruptured ectopic pregnancy. A most pleasant reflection is the

fact that these cases can be so successfully managed by prompt surgical interference. It gives confidence and hope to the medical attendant, and it is a warning, and a solemn one too, to lose no time in adopting the prompt course of procedure taken in the case just reported."

Dr. F. Leber: "Many cases of hematocele recover by absorption, without operative interference."

Dr. McMurtry: "When rupture occurs through the free surface of the tube it is a deadly accident from hemorrhage, unless treated by surgical means. If the rupture, however, takes place into the folds of the broad ligament the effusion may become absorbed, or the fetus may develop there, forming abdominal pregnancy and going on to and beyond full term. The fetal mass may break down and suppurate, discharging through the rectum or the bladder. In any contingency the safest result is secured by abdominal section. There is less danger in abdominal section according to modern methods than by taking the risk of these several terminations."

Dr. T. P. Satterwhite: "It is the first specimen of the kind I have ever seen. I agree with the essayist that it is an exceedingly difficult matter to diagnose absolutely the condition of things. In several cases, which I have seen with Dr. McMurtry, I considered his advice to open the abdomen unwise, but in every instance have been convinced that it was the correct course to pursue."

Dr. F. Leber: "I was asked to see a young man who was injured out West. It was a case of crushed foot. When he arrived at his home in Louisville he had been treated for three weeks. The foot was in a very bad condition and I advised amputation above the ankle-joint. This was refused, and the case was treated by another physician. I was again asked to see him, and again suggested amputation, which was refused. I report this case to say that in my opinion in all such cases amputation should be done above the ankle-joint. In my opinion Chopart's amputation has never been satisfactory. I recall to mind a case left in my care by the late Dr. Cowling in which Chopart's amputation was done. It left a miserable pointed stump. I treated it for months with various devices, but never succeeded in getting a good stump. I was compelled finally to amputate. My experience during the

war convinced me that none of these operations below the ankle gave such good results as amputation above the ankle."

Dr. J. W. Guest (by invitation): "I had two cases of this description in the hospital. Both healed by primary union and were discharged at the end of one month. It seems to me that in doing Chopart's amputation you save the ankle-joint as a natural joint, which is better than a artificial one. At each of these operations tenotomy was performed to prevent the stump from pointing. My experience with Chopart's amputation has confirmed that operation in my confidence. It gives a good solid base for a foot independent of any artificial foot."

Dr. I. N. Bloom: "I wish to make a report of a case, although one case can not determine the method of treatment for a given disease. I recently had a case of sweating of the feet. The means I employed in this case were very simple. I had the patient bathe the feet in a solution of bichloride of mercury, 1 to 1,000, morning and evening. After rubbing the surface carefully so as to remove the dead epidermis macerated by the sweat, I directed the following course, which is partially though not wholly original. I had a plaster sole, partially soaked in a bichloride solution put in the shoe, the solution being 1 to 1,000. After drying the sole and placing it in the shoe, I sprinkled it with powdered boric acid. As regards the advantage of this method of treatment there is much diversity of opinion. In this case the result was quite satisfactory. If this treatment were uniformly successful it would point to a micro-organismic origin for the disease rather than a neurological. My experience has been too short to determine, but this I know, that in many cases, especially of the lighter forms, it is of nervous origin. I have always found it much easier to cure simple hyperidrosis of the feet than of the hands, and have found that Hebra's method with diachylon ointment, is the only one promising any hopes of success. I have tried many other means recommended by worthy men, but always had to return to the diachylon. The inconvenience of this latter method is great, but patients bear it, or will bear any treatment that will help to get rid of the disagreeable disease. This is especially true of women.

Dr. William Cheatham: "I have seen recently three cases of congenital pharyngeal fistula. They all opened on the left side of

the larynx. Colored fluid, such as the methyl-violet solution injected into the fistula passes into the pharynx; a peculiar viscid fluid, with air bubbles, escapes when pressure is made on the tract. These cases are very difficult to heal, as the course of the fistula is so sinuous, and the healing must commence at the pharyngeal end; the best method to close them is by the galvano-cautery wire.

CATAMENIAL TOXÆMIA.

At a meeting of the Academy of Medicine, held December 2nd, M. Henrot (*La Tribune Medicale*, December 4th, 1890) remarked that intestinal disorders corresponding to menstrual periods of their nurses were frequently observed in infants. He has met with a case in which an eruption occurred in an infant who had been weaned. The eruption always appeared in the same spot, simultaneous with the suppositious menstrual period during lactations, or with the actual epochs after weaning, that is, after physical dependence of the child upon the mother had ceased. Two months after her confinement the mother had suffered from an eruption, which must have profoundly modified her blood, since that fluid communicated special properties to the milk, which in its turn, had modified the blood and, therefore, the constitution of the babe for fifteen or sixteen months.

Selected Articles.

THE QUESTION OF EARLY OPERATION IN DISEASE OF THE VERMIFORM APPENDIX.*

Perhaps no subject is at present of more general interest to the physician and surgeon than the question of operation in disease of the vermiform appendix. Much attention has been paid during the past few years to both its pathology and treatment, but there yet remains room for discussion upon the unsettled points connected with the management of these cases. For it is still true, that while various indications for surgical interference have been given by a number of writers, there is in reality considerable difference of opinion in the profession as to what cases demand early operation, and what cases should be dealt with in a more conservative way.

Although a large majority of the patients submitted to early operation have recovered, a study of their histories will convince one that these good results do not prove the necessity for such prompt interference in all cases of appendicitis, even of those with fairly well marked symptoms. For in some of these patients nothing more serious has been found than a mild or moderately severe catarrhal inflammation of the appendix, and the experience of numerous observers has shown that a considerable proportion of similar cases make good and permanent recoveries without any operation whatever. I believe that a majority of physicians, if not of surgeons, will testify to the truth of this statement. Bearing on this point we have the statistics of Fritz, 36 per cent. of all his patients with appendicitis recovering without suppuration and

*Read before the Medical Society of the County of Kings, Nov. 18, '90.

without surgical aid. Numerous autopsies in which the condition of the appendix has been carefully noted would also show that it is more frequently the seat of mild grades of inflammation than is generally supposed. Toft states that in 300 consecutive post-mortem examinations, where death had resulted from various causes, 36 per cent. showed previous or present disease of this organ. Hektoen found that in 280 autopsies, 15 per cent. gave evidence of having had some inflammatory disease of the peritoneal investment of the appendix, or its immediate vicinity, from which recovery had taken place, no reference being made to any pathological changes that may also have been present within the appendix in the cases examined. According to Bridge, "one-fourth at least of all post-mortems show recoveries from previously existing inflammation, or other disease of the appendix." It is fair to presume that in at least the majority of these cases a diagnosis of appendicitis could have been made by careful examination at the time such inflammation occurred. These facts are entitled to consideration in advising early operation, or in estimating the probable value of such interference.

It has been argued that, in view of the uncertainty of diagnosis in many of these cases, early exploratory laparotomy is the proper procedure whenever there is evidence that the appendix is in trouble. Is laparotomy, then, so absolutely safe, even in the hands of the most experienced that it should be thus advised for diagnostic purposes within the first few hours of an attack? Ought not the surgeon to wait until reasonably certain, from a careful consideration of the symptoms present, that operation is demanded for purposes other than exploratory, and that it will promise a better prospect of recovery than a more expectant treatment? It is urged that such delay as this course necessitates may sometimes render subsequent operation unsuccessful when the patient might otherwise have recovered if laparotomy had been performed in the incipiency of the disease. True, but is not this better than to submit a patient, thus early, to a positive danger for the purpose of avoiding only a possible one. As well for the patient, and far better for his advisers, that he should die from disease, when operation in spite of their best judgment was too long deferred, than that he should die from the effects of an operation itself too hastily and unnecessarily resorted to. To be

caught on either horn of the dilemma would be unfortunate; but until a majority of surgeons experienced in laparotomy can agree that the operation carries with it no dangers whatever, this feature of the question should not be entirely ignored in deciding upon early interference. What most concerns the patient is not what special operation can be shown to give the most brilliant results in a large number of cases, but what will give him in his individual case the best prospect of a speedy and complete recovery with the least possible risk and suffering.

I do not wish to be understood as opposing early operation in suitable cases. Surely, enough has been learned in the last few years to convince even the most conservative that prompt surgical interference is demanded in a certain proportion, perhaps a majority, of patients with appendicitis, and gives the sufferer the best and possibly his only chance of life. But I wish to be understood as opposing operation for diagnostic or other purposes in the absence of symptoms indicating with reasonable certainty near or remote danger to the patient. It is true, as stated by different writers, that the symptoms do not always enable us to accurately determine the extent and severity of the disease and the consequent danger that may threaten, but their careful consideration for one, two or three days after the beginning of the attack, except in those rare cases of sudden perforation and septic peritonitis, will at least enable us to decide upon a line of action less frequently detrimental to the interests of the patient than if we promptly resort to laparotomy in all cases of appendicitis without regard to the character and duration of the symptoms present. But these should be watched from hour to hour and not at long intervals, for in the early recognition of those cases which should be submitted to surgical interference lies the patient's greatest safety.

I am led to make these remarks because the impression likely to be conveyed by some of the literature upon this subject is, that all cases of appendicitis, as soon as recognized, should, irrespective of their apparent severity, be submitted to laparotomy; whereas we know that a large number of cases make good and complete recoveries without any operative interference whatever; and it should be as much the duty of the surgeon to decide when not to operate, as when and how laparotomy should be performed.

In my own experience during the last two years I have met with

three cases of appendicitis which, while well marked, have run a comparatively mild course. In one case there was a second attack, less severe, however, than the first. Of these patients two were females. In only one did the temperature go as high as 102° , and it remained at that point for only a few hours. In the others the highest temperatures noted were 101° and 99.5° . In no case did the pulse go above 100. Pain was in all the most prominent symptom. In two cases it was felt from the first in the right iliac fossa; in one it was at first more or less distributed over the abdomen, subsequently becoming localized in the neighborhood of the appendix. In one case pain was notably increased when upon the left side, the patient describing the sensation as a dragging or tearing kind referable to the region of the cæcum.

In all cases the seat of greatest tenderness to finger pressure corresponded to the point indicated by McBurney. In only one could any well-defined induration be made out, and this was in the patient whose highest temperature was 102° . Such may, however, have been present in another case and escaped detection, for this patient was obese. In one, some nausea was complained of for the first few hours, but there was no vomiting in any case. Tympanites was moderate in two patients, and well marked in one. In two, improvement in all the symptoms began on the second day. In the one in which induration was present a decided change for the better was not noticed until the third day. These cases all recovered under opium, rest and hot fomentations. The one in which a relapse occurred has been entirely free for four months from any symptoms referable to the appendix.

Three cases, two of them males, have also come under my observation after they had gone on to the formation of abscess. In one case a large enterolith was found to be the cause of perforation and the formation of a retro-peritoneal abscess. In the other two cases, also, the pus was evacuated without opening the free peritoneal cavity. In all the disease had been attended from the onset with pronounced symptoms. The dangers incident to the formation of such abscesses, and to such extensive and prolonged suppuration as occurred in all these cases, are too well known to need repetition; and although these patients recovered, it was after long and serious illness, and I believe that they passed through greater peril than would have attended early operations.

I have not given the histories of these cases, because, unfortunately, it was impossible to obtain an exact record of them prior to the formation of abscess, the period in which an accurate account of their symptoms would have the most value in this paper, and because subsequently to that time their histories do not differ materially from those so often reported of similar cases.

Of cases demanding early operation at the time, or shortly before they came under my observation, I have met but two. One was a boy aged 17, seen with Dr. L. M. Fleming. In this case the first symptom was severe pain in the right iliac fossa, which the patient thought to be a colic, and delayed sending for his physician until the following day. I saw him fifty-six hours after the beginning of the pain, which was still present, although fairly well controlled by opium. The temperature 101° pulse 108, respiration hurried. Abdomen distended. Right rectus the most tense. The most sensitive spot to finger pressure corresponded to McBurney's point. No localized tumefaction could be made out. The family would not entertain the idea of operation. The patient's symptoms continued to grow more alarming, and he died on the fifth day of peritonitis, induced by probable perforation of the appendix. The highest temperature noted in this case was 102.5° but the pulse reached 160.

In the other case operation was permitted, but not until the sixth day.

The patient was a male, thirty-two years of age. Previous health excellent. On April 17th he noticed a slight pain in the right groin, which, however, did not keep him from business. The following day the pain became suddenly worse, and at the time he had a severe chill. From a druggist he obtained some cholera mixture, which, however, gave no relief.

April 19th, two days from the beginning of his attack he sent for his physician, Dr. E. F. Pearce, to whom I am indebted for the accompanying history. The patient now complained of severe pain in the right iliac fossa. There was marked tenderness on pressure, and some tympanites; and slight induration could be detected in the neighborhood of the appendix. At 2 p. m. he had another severe chill, and several attacks of vomiting. Temperature 102° pulse 100.

April 20th, nervous disturbance marked. Patient irritable and

at times incoherent. Pain and tympanites less. A well-defined elongated tumor could now be detected in the right iliac fossa. Bowels had moved freely during the night. Pulse 90, temperature $102\frac{1}{2}^{\circ}$; chill in the afternoon.

April 21st, pulse 105, temperature 103° . Had chill during the night.

On the morning of the 22d I first saw the patient with Dr. Pearce. The temperature at this time was $102\frac{1}{2}^{\circ}$, pulse 100. A well-defined tumor could be made out in the right iliac fossa. Tympanites moderate. Advised operation, to which, however, the patient and friends were averse.

April 23, Dr. William Gilfillan saw the case, and agreed with us as to the advisability of immediate operation. The patient's condition was so much worse than on the previous day, that the friends now readily gave their consent. He had been delirious for the greater part of the night, and two severe chills had occurred in the last twenty-four hours. Temperature 104° , pulse 110, and weak, abdomen more distended, and the tumor could be less readily made out.

Laparotomy by lateral incision at 4.30 p. m. Present, Drs. William Gilfillan, Pearce, Skerry, and H. Wallace. No fluid in abdominal cavity. No evidence of peritonitis except moderate congestion over the cæcum, and some fibrinous exudate along its inner border. The major portion of the tumor was seen to occupy the iliac fossa outside of the cæcum, though extending beneath and a little within its inner border. To the outer side, the peritoneal covering of the cæcum was continuous with that covering the tumor; in other words, the tumor was clearly retro-peritoneal at this point. To the inner side, the cæcum was firmly adherent to the parietal peritoneum through the medium of the exudate above mentioned. Percussion showed this mass to be tympanitic, and a hypodermic needle gave vent to a small quantity of fœtid gas. Keeping close to the ilium, I made a small opening into the tumor, through which opening the finger entered what appeared to be infiltrated cellular tissue, and not a distinct cavity. From this escaped some gas and a small quantity of extremely offensive and bloody serum, mixed with some feculent material, but no pus was seen. In removing this, no difficulty was experienced in protecting the peritoneal cavity. The patient's condition was so

bad that it was deemed unwise to make any further search for the appendix, and a drainage tube was introduced, iodoform gauze applied in the usual way, and the ordinary abdominal toilet made.

The patient did not rally, but continued to grow weaker and more delirious, and died thirteen hours after operation. Nausea and vomiting, which, however, was never feculent, were prominent symptoms and continued till death.

Post-mortem was made by Dr. Gilfillan. No pathological appearances in the abdominal cavity other than those noted at the time of operation, except the ordinary post-mortem changes. Upon breaking up the adhesions which bound down the cæcum, and these were quite firm—the appendix was found lying posterior to the intestine, and within the infiltrated area. It was completely gangrenous and contained two moderately large enteroliths. Perforation had taken place at its base.

Although a well-marked tumor was present in this case, and the operation was not performed until the sixth day of the disease, I opened the abdominal cavity by the lateral incision, instead of endeavoring to reach the mass by Parker's method, and for the following reasons: The diminution in the prominence of the swelling to a greater extent than the increased tympanites would account for, and the marked and rapid change for the worse in the patient's general condition, gave reason to fear that perforation of the limiting wall of the tumor had taken place, and that a septic peritonitis was being initiated. In addition to this, the lower border of the mass was too far above Poupart's ligament to have been easily reached by the latter route.

Gangrene of the appendix from the presence of concretions impacted at or near its base, gradual perforation, the formation of protective adhesions around the appendix and along the inner border of the cæcum, escape of gas and fecal matter into the post-cæcal cellular tissue was the probable course of the disease. Whether the appendix in this case had a mesentery and the perforation occurred within it, or whether none existed and the post-cæcal cellular tissue was reached by ulceration through the parietal peritoneum, could not be determined.

Would the termination have been otherwise had operation been delayed in the expectation that a safe abscess would form and be-

come approachable without entering the free abdominal cavity? I believe it would not. The degree of septic infection, as evidenced by the rapid failure of the patient's strength, was too great to permit such a favorable issue. The severe pain, vomiting, recurring chills, variable temperature—now high, now only slightly elevated—and the nervous disturbance so characteristic of septic poisoning, were sufficient to mark the case a serious one from the beginning. In view of the well-known fatality in such cases under the expectant treatment, and in view of the success that has already attended early operation, this case, in the writer's judgment, was one in which laparotomy on the second or third day of the disease was clearly indicated. The patient and friends were, however, so opposed to any such interference that operation was permitted only on the sixth day, when the patient was so weakened by prolonged septic poisoning that it was apparent to all that death must shortly occur unless surgical aid could afford relief.

I have here referred to and partially reported eight cases, with two deaths, a mortality of 25 per cent., about the same rate as that generally given for cases treated medically and by late operation. These would properly come under the same head, for in none was early operation, as we now understand the term, resorted to. It is true that they furnish only negative evidence in favor of early interference, but as such they may be of some value, for the results compare unfavorably with those obtained by early laparotomy.

While it is generally conceded that no fixed rules can be formulated that will be applicable to all cases, but that each must be judged to a certain extent upon its own merits, I would venture, in conclusion, to present the subject for your consideration in the following summary:

I. That the majority of those cases of appendicitis characterized by mild symptoms require no surgical interference unless such symptoms increase, or persist unabated, after the third or fourth day.

II. That the presence of slight induration, accompanied with moderate pain and tenderness and but little constitutional disturbance, does not necessarily indicate operation. Where, however, such induration continues to increase beyond three or four days,

or there is an increase in the general symptoms by that time, operation will promise more than an expectant treatment.

III. That cases presenting either from the first, or at any time in their course, marked constitutional disturbance, notably chills, a continued high temperature or a variable temperature, rapid pulse, vomiting and increasing tympanites, with or without the presence of tumor, demand operation as early as possible.—*The Brooklyn Med. Jour.*

THE NECESSARY PEROXIDE OF HYDROGEN.*

BY ROBERT T. MORRIS, M.D., OF NEW YORK.

Stop suppuration! That is the duty that is imposed upon us when we fail to prevent suppuration.

As the ferret hunts the rat, so does Peroxide of Hydrogen follow pus to its narrowest hiding place, and the pyogenic and the other micro-organisms are as dead as the rat that the ferret catches when the peroxide is through with them. Peroxide of hydrogen, H_2O_2 , in the strong 15-volume solution, is almost as harmless as water; and yet, according to the testimony of Gifford, it kills anthrax spores in a few minutes.

For preventing suppuration we have bichloride of mercury, hydronaphthol, carbolic acid, and many other antiseptics; but for stopping it abruptly, and for sterilizing a suppurating wound, we have only one antiseptic that is generally efficient, so far as I know, and that is the strong peroxide of hydrogen.

Therefore I have qualified it, not as “good” not as “useful,” but as “necessary.” In abscess of the brain, where we could not thoroughly wash the pus out of tortuous canals without injuring the tissues, the H_2O_2 injected at a superficial point will follow the pus, and throw it out, too, in a foaming mixture. It is best to inject a small quantity, wait until foaming ceases, and repeat injections until the last one fails to bubble. Then we know that the pus cavity is chemically clean, as far as live microbes are concerned.

*Published by the Journal of the American Medical Association, Chicago, August 9th, 1890, page 216.

In appendicitis, we can open the abscess, inject peroxide of hydrogen, and so thoroughly sterilize the pus cavity that we need not fear infection of the general peritoneal cavity, if we wish to separate intestinal adhesions and remove the appendix vermiformis. Many a patient, who is now dead, could have been saved if peroxide of hydrogen had been used when he had appendicitis.

The single means at our disposal allows us to open the most extensive psoas abscess without dread of septic infection following.

In some cases of purulent conjunctivitis we can build a little wall of wax about the eye, destroy all pus with peroxide of hydrogen and cut the suppuration short. Give the patient ether, if the H_2O_2 causes too much smarting. It is only in the eye, in the nose and in the urethra that peroxide of hydrogen will need to be preceded by cocaine (or ether) for the purpose of quieting the smarting, for it is elsewhere almost as bland as water.

It is possible to open a large abscess of the breast, wash it out with H_2O_2 , and have recovery ensue under one antiseptic dressing, without the formation of another drop of pus.

Where the cellular tissues are breaking down, and in old sinuses, we are obliged to make repeated applications of the H_2O_2 for many days, and in such cases I usually follow it with balsam of Peru, either in fluid form or used with sterilized oakum, is a most prompt encourager of granulation.

If we apply H_2O_2 on a probang to diphtheritic membranes at intervals of a few moments, they swell up like whipped cream and come away easily, leaving a clean surface. The fluid can be snuffed up into the nose and will render a foetid ozæna odorless.

Peroxide of Hydrogen is an unstable compound, and becomes weaker as oxygen is given off, but MARCHAND's 15-volume solution will retain active germicidal power for many months if kept tightly corked in a cool place. The price of this manufacturer's preparation is about 75c per pound, and it can be obtained from any large drug house in the country.

H_2O_2 must be used with caution about the hair, if the color of the hair is a matter of importance to the patient; for this drug, under an alias, is the golden hair bleach of the *nymphs du pave*, and a dark-haired man with a canary-colored moustache is a stirring object.

Extracts from Home and Foreign Journals.

SURGERY.

TREATMENT OF ERYSIPELAS.

The *Lancet*, January 10, 1891, says that an elaborate research, clinical and bacteriological, has recently been published by Prof. Nussbaum's assistant, Dr. Julius Fessler, on the treatment of erysipelas by ichthyol, a plan which has been for some years extensively adopted in Munich. From laboratory experiments it was evident that, though ichthyol has only a slight effect in preventing the development of staphylococci, it has a very potent deterrent influence on the multiplication of streptococci, and it is well known that it is the latter kind of bacteria that are the cause of erysipelas. The method of treatment consists mainly of rubbing a strong ichthyol ointment energetically, and for ten minutes at a time, into the affected surface and in its neighborhood. Ichthyol in the form of pills may also be given internally. Where there is a wound it must be very carefully disinfected, and an antiseptic dressing applied. The result of this treatment as compared with ordinary methods are embodied in several instructive tables. From these it appears that, while the mean duration of the cases treated by other methods from 1880 to 1888 was about twelve days, in no single year falling below nine days, the cases treated by ichthyol from 1886 to 1888 presented a mean duration of under seven days, while in the first half of 1889 it fell to 5.6 days.

OPERATIONS UPON LARGE OLD INGUINAL HERNIAS.

Prof. Kuester (*Brooklyn Med. Jour.*) calls attention to a new complication which may be met with in the course of operations for the reduction of old large inguinal hernia. In a case cited in

which the protrusion, the size of a child's head, had remained unreduced for upwards of a year, the operation for radical cure was resorted to. Without the slightest evidence of either nausea or vomiting, the patient gradually became cyanosed, with shallow breathing. This occurred synchronously with the attempt to reduce the contents of the sac. During this effort it became plainly evident that the abdominal space was too small to permit of reposition, and K. determined to resect a portion of the cæcum, together with the vermiform appendix (distended with enteroliths), which still remained unreduced. When the above-mentioned untoward symptoms manifested themselves, artificial respiration was resorted to, but no improvement followed. Rapid tracheotomy gave ingress to air, but the patient had passed beyond restoration. A mass of partially digested food escaped from the trachea after being opened. This had been forced out of the stomach along the œsophagous into the pharynx, and thence by the respiratory act into the larynx by the mechanical pressure incident to the attempt at reposition of the hernial mass.

K. suggests that in all such hernia cases the stomach be washed out preliminary to the operation.

A CASE OF PENETRATING WOUND OF THE ABDOMEN AND THORAX—RECOVERY.

On the evening of February 4th, C. K., age twenty-four, applied to me for treatment of a knife wound which he had just received upon the street from the hand of a murderous assailant. He was in a state of partial syncope, but never lost consciousness.

Upon examining the wound I found an incision, about one inch in length, extending laterally along the lower border of the twelfth rib, and a little in front of the axillary line. The wound bled freely, but hemorrhage yielded to applications of hot aseptic solutions.

Upon exploring the wound my probe passed to a depth of four inches obliquely inwards and upwards. I was satisfied from the location of the wound externally and the direction it took that both cavities, abdominal and thoracic, had been opened into; the former directly from without, and the latter by extension of the blade through the diaphragm. Assisted by Dr. McKenzie of

this city, I dressed the wound antiseptically and placed the patient in bed.

At an early hour the next morning I was called to see the patient, the messenger saying he was "spitting blood." I found free hemoptysis, but it readily yielded to ergotine and gallic acid. Examination of the chest showed dulness over the whole left side except at the apex, with complete flatness at the lower portion of the chest. Temperature was normal, pulse but slightly accelerated. It was evident that the pleural cavity was partially filled with blood and that the lung had been punctured.

The patient was kept for several days on the hemostatics, during which time he occasionally spit blood. After this the bleeding entirely ceased, the dulness disappeared, the wound healed rapidly. There was no elevation of temperature during his convalescence, nor were there any abdominal symptoms, except slight tympanites, lasting three or four days.

The patient was discharged February 17th. perfectly well.

This case is reported because of the interest attaching to penetration of both great cavities of the body, and a wound of the diaphragm, all of which healed in a very brief period, without any untoward symptom, except hemoptysis, and this was readily controlled by constitutional means.—*Boston Med. and Sur. Jour.*

TREPHINING THE SPINE.

From a painstaking study of this question Dr. Chipault (*Gazette des Hopitaux*) has announced the following conclusions;

1. Trephining is useless when after the cord is contused the displaced fragments fall back on to their normal position.

2. Trephining is certainly of use (*a*) when the cord is pressed between the body and the posterior arch ; (*b*) when the cord is compressed by blood clots. Under these two conditions no time should be lost, since secondary degeneration sets in very rapidly.

3. Trephining is absolutely indicated (*a*) when the spinal symptoms are due to compression of the cord by fragments posterior to (*b*) when equinia, whatever the cause may be, operate at the end of some months after the condition has remained stationary for some time.—*Med. Record.*

MEDICAL.

KOCH'S REMEDY AND ITS RESULTS.

This theme still occupies the attention of several foreign societies, notably the Berliner Medicinische Gesellschaft (*International Klinische Rundschau*, February 8th, 1891). Professor Virchow (meeting of January 28th 1891) claimed that there was but little to add to his report of the last session describing the action of the remedy upon the internal organs. He presented additional specimens, from two patients who had died in the course of the treatment, that showed fresh tubercle in different organs, in so far confirming his earlier expressed opinions.

Dr. Lassar presented a young girl that, following a tubercular inflammation of the hip, developed a large ulcer on the thigh. After a few injections with a small dose, the sore cleared up, and healed, its place being marked by a smooth cicatrix.

Flatau reported a case of laryngeal tuberculosis that at first improved, but later developed additional tubercles upon the vocal cords.

Furbrenger, out of one hundred patients, reports forty-six who have been more than two months under treatment, of these, three no longer present the characteristic symptoms, fifteen have been decidedly improved, nine unimproved, and five have become worse, and seven have died. Furbringer is of the opinion that in florid phthisis, or those presenting marked hectic, or great weakness, should not be treated.

Prof. Pribram (*Verein Deutscher Aerzte in Prag.*) reports that sixty cases have been under treatment during the past two months. Of these three, he thinks, may be considered as cured. He also notes several unfavorable results; in one case dangerous hemoptysis, and in another a rapid extension of the tubercular process that was fatal in eighteen days.—*Jour. A. M. A.*

NATURE AND TREATMENT OF DIPHTHERIA.

This subject is considered in a lengthy article by Sevestre (*Le Progres Med.*, Sept. 27, 1890). He reviews the work of Klebs, Loeffler, and others, and discusses the probable action of bacteria in the production of the disease. Injections of the culture liquid

of the bacillus of Klebs, deprived by filtration of the germs themselves, invariably produce the toxic symptoms of diphtheria. The evidence seems to the author clear that these symptoms are due to a poison generated by the bacilli. It is not, however, sufficient to explain all the phenomena of the disease, and there is no doubt that numerous other germs are concerned in their production. He holds strongly the belief that the disease is at first local, and the toxic symptoms result from the absorption of soluble poisonous products elaborated in the false membrane. The accessory micro-organisms no doubt play an important part in the development of the complications, notably broncho-pneumonia. The importance of continued bacterial study in relation to diphtheria is very great, and it is to be hoped that it will soon result in more effective and rational treatment. The author has had excellent results from the local treatment proposed by Gaucher. This consists in the forcible removal of the membrane and the application of active antiseptics. The antiseptic employed by the author is made after the following formula: R Camphor, 20 parts; castor oil, 15 parts; alcohol, 10 parts; carbolic acid, 5 parts; tartaric acid, 1 part. This is to be thoroughly applied by means of cotton attached to a probe. The operation is a dangerous one unless the application of the antiseptic is very thorough. It is very painful, and for obvious reasons is not to be employed on children.—*N. Y. Med. Jour.*

NEW FORMS OF THE MICROBE OF PNEUMONIA.

The *Lancet* for February 28th states that Dr. Guido Banti has reached some rather complicating conclusions regarding the diplococcus of acute pneumonia. He professes not only to have found this microbe in every one of the forty-seven cases of fibrinous pneumonia examined, but to have discovered that the diplococcus occurs in four varieties—one of which is doubtless identical with the much-debated Fraenkel-Weichselbaum coccus—differing in their pathogenic virulence when inoculated in animals. Bant believes that he has demonstrated that the diplococcus of Fraenkel and Weichselbaum is one of the less virulent of the four forms; and he points out that in the years 1886 and 1887, as well as last year, the type of pneumonia was a relatively mild one, and then it was that only that diplococcus could be found. But in 1888 and

1889, when the cases were much more severe, the three other forms of this micro-organism were the ones most constantly met with. The bacillus of Friedlander was not found in this series of cases; the same is true of the streptococcus pyogenes. The investigations were extended to eight cases of secondary broncho-pneumonia which yielded the diplococcus alone or associated with the staphylococcus pyogenes aureus, or the latter alone, or in association with the streptococcus pyogenes.

In exceptional cases other microbes, such as the bacillus of Friedlander, were found. The chief points of interest in this investigation were the well-nigh invariable presence of the diplococcus pneumoniae in lobar pneumonia, not only in its exudation in the lung and pleura, but often, probably always, in the blood; the variations in the intensity of the disease dependent on the differences of the virulence of the micro-organism; and, lastly, the fact that complications are, as a rule, excited by the same agency.—*N. Y. Med. Jour.*

DURATION AND METHOD OF TREATMENT IN SYPHILIS.

The plan of treatment employed by Leloir, of Lille (*Boston Med. and Surg. Jour.* December 1890, from *Monatshrift. f. prakt. Dermalol.*, Bd. vi, No. 6), is as follows: The initial lesion is treated with applications of a mercurial preparation. Constitutional treatment, which is withheld until secondary symptoms appear, consists of daily inunctions of from thirty to sixty grains of mercurial ointment, and the first course is continued for a period of from six to ten months. An interval of freedom from treatment for three weeks to two months is then allowed, and the inunctions are again instituted and kept up until the end of the second year. To prevent the accumulation of the drug, a diaphoretic or a laxative is occasionally given; and in the exceptional cases in which headache or bone pains are severe, iodide of potassium in combination with the bromide is prescribed. After the end of the second year, the course depends upon the severity of the case. If symptoms have been absent for a long period, the inunctions are made every three months for ten days, and then the iodide of potassium is exhibited for several weeks, in doses of from thirty to forty-five grains daily. After the third or fourth year, if there has been absence of symptoms for one year, the inunctions are

made twice a year for ten days, and followed by a course of the iodine as before. The plan is continued if the patient is seen after the fourth year.

Leloir avoids the internal administration of mercury, on the ground that it may give rise to unfavorable symptoms, and employs it only when there is some reason why the inunctions cannot be practised. Hypodermic injection of mercurial preparations he seldom resorts to, and then only in hospital patients.—*Univ. Med. Mag.*

TREATMENT OF FURUNCULOSIS.

Dr. Veiel, at the annual meeting of German physicians held at Bremen, stated that he used in the treatment of furunculosis a paste consisting of equal parts of oxide of zinc and vaseline, to which was added 4 per cent. boric acid. This ointment was thickly spread on lint. In cases of circumscribed furunculosis the paste was rubbed in and around the diseased parts three times daily. If the affection was universal, the whole body was anointed with the application. Sublimate baths were at the same time used when the patient could bear them. In a case of universal furunculosis a perfect cure was obtained in several weeks. Large boils were poulticed.—*Cin. Lancet-Clinic.*

OBSTETRICS.

INANITION AS RELATED TO INFANTILE MORTALITY DURING THE FIRST MONTH OF LIFE.

Nasi (*Archiv. Ital. di Ped—Archiv. Pediatrics*) says the ultimate cause of the greater number of deaths during the first month of life is inanition which may exist in infants apparently strong at birth, but especially with those who are the subjects of congenital weakness.

It is of first consideration that proper nutriment be given, and second, that it be given in the proper way. Maternal nourishment is preferable to any other; with strong children it may be taken directly from the breast, or with the aid of an ordinary nursing-bottle; with feeble children a nursing-bottle should be

employed. If maternal nourishment is absolutely impossible, one should have recourse to a wet-nurse whose confinement has been sufficiently recent to make her a suitable substitute of the mother.

If such means of nourishment is also impossible, moreover, if the milk of the nurse continues to show colostrum corpuscles, the infant should receive a properly prepared milk, especially for the first few days. It is essential that the vessel in which it is prepared be aseptic, as when so made it may be of more service to the infant than anything else; especially is this true for very feeble infants who have no power of suction.

Forced nourishment will be limited to a very few cases, and by such means it may be possible to nourish infants born during the sixth month.

Alimentation which is entirely artificial, while not advisable in general, will yield better results if practiced under entirely normal conditions, hygienically considered. Mixed alimentation is sometimes so carried out as to give the best results, and is the means of saving a large number of children who would otherwise die of inanition.—*Am. Lancet.*

TREATMENT OF FISSURED NIPPLE AND ENGORGED MAMMARY GLAND.

In the treatment of fissured nipple, when the cracks are at all extensive, the ordinary remedies recommended from time to time have been found more or less unsatisfactory. Painting with tincture of benzoin, for instance, while an excellent procedure for small superficial cracks of the nipple, is perfectly worthless in more advanced cases.

The writer has found in hospital and private practice that excellent results can be secured in bad cases by the application of an ointment made up of equal parts of castor oil and subnitrate of bismuth. This mixture makes a very smooth, soft ointment, which relieves the pain, and is an excellent protective to the part. Before application, the nipple and surrounding skin should be carefully cleansed and disinfected, and then the ointment should be smeared on plentifully. If it is necessary for the child to nurse from the affected nipple, it can be allowed to do so without the necessity of removing the ointment from the nipple, as must be done if tannic acid or the salts of lead are used. This is a

serious disadvantage of many forms of treatment recommended for fissured nipple, for the irritation of removing the substance employed as a local sedative neutralizes its action.

For the engorgement and pain in the mammary gland itself, which so often accompanies fissured nipple, the writer has had excellent results from the use of an application of lead water and laudanum, which is applied by means of a cloth covering the whole breast, renewed at frequent intervals, and kept in place by a suitable mammary binder, either that recommended by Richardson or the Murphy bandage. This not only retains the dressing but supports the breast and exercises even pressure upon it. With this treatment the development of mammary abscess is a rare event. If the child can be nursed from the other breast alone it is safer, I think, to draw the milk from the affected gland by means of a breast-pump until the cure is almost complete. If it is necessary that the child should nurse from the cracked nipple, a glass nipple shield with a rubber tip must be employed.—*Univ. Med. Magazine*.

INTRA-UTERINE TAMPON FOR POST-PARTUM HEMORRHAGE.

Auvard (*Archiv. de Tocologie*, December, 1890) considers Duehrsen's plan of treating post-partum hemorrhage by an intra-uterine tampon of iodoform gauze a safe and reliable treatment. He finds the mortality in sixty-seven cases about six per cent.

The method for applying the tampon is as follows: The anterior and posterior lips of the cervix are transfixed and drawn downward with tenacula, and a strip of iodoform gauze carried by means of dressing forceps to the fundus. The other hand is placed on the fundus through the abdominal wall, while the cavity of the uterus is being filled with the gauze. The tenacula are removed and the end of the gauze is left at the vulvar opening. The tampon should be removed in from twelve to twenty-four hours. He considers two grades of post-partum hemorrhage—viz., bleeding of moderate severity, and hemorrhage—alarmingly profuse.

In the former variety the loss of blood may be due to uterine inertia, wounds of the vulva, vagina or cervix; and the treatment of these milder cases should include, besides ligatures and sutures, antiseptic injections of hot water, the administration of ergot and the application of the utero-vaginal tampon. When

the loss of blood is alarming, uterine inertia is the cause. The bleeding should be controlled by compression and massage of the uterus through the abdominal wall, by the introduction of the hand into the uterus to remove its contents, followed by the uterovaginal tampon.—*Univ. Med. Magazine.*

DURATION OF PREGNANCY.

Oliver concludes, after very careful observation, that the duration of pregnancy in the human female varies as much as it does in the case of many of the lower animals. Issmer, reckoning only cases in which the foetus was well developed, asserts that the duration ranges from 260 to 304 days. But Oliver believes there must be some error in this statement. If we reckon from the last menstruation, we must be careful to ascertain the exact date of the cessation of this, for it will be remarked that where the duration of the discharge varies little, the woman, when asked, is more likely to give the date of beginning than the date of cessation of the last menstruation, and in this way mistakes may arise in our calculation to the extent of four or more days. The majority of authors are agreed that in reckoning the duration of pregnancy in woman, we ought to fix the probable date of delivery on the 278th day from the cessation of the last menstruation. He is of opinion that the best results will be obtained by ascertaining, first, the date of the cessation of the last menstruation, and then the usual duration of the inter-menstrual period in each given case; the number of inter-menstrual days should then be divided by two, and it will be found that the 260th day from the middle of the inter-menstrual period will most probably be the date of confinement.—*Liverpool Medico-Chirurg. Journal.*

AN UNEXPECTED CAUSE OF PUERPERAL FEVER.

Prof. Paramunchi has reported a case of puerperal fever in which a very unexpected cause was brought to light, that is to say, the putrid remains of a tapeworm in the uterus. No untoward symptoms seem to have occurred until the tenth day after delivery, when the patient became feverish and prostrate, and lost her appetite. The lochial secretion was very foul. Large doses of quinine were ordered, but no effect was produced on the temperature, which the next day was 104.2°. The uterus was consequently washed out,

two catheters being used for the purpose, as a regular uterine instrument was not at hand. The outlet catheter, after discharging some very fetid fluid, was choked up by what was found to be a putrid tapeworm. This was of course removed, and sublimate irrigations given, and the symptoms soon disappeared. Regarding the question of how the tapeworm came to be in the uterus, inquiries elicited the fact that a few days before her confinement the patient had been suffering from dysenteric symptoms, and, in view of her condition, had not taken any medicine. It is probable that the worm managed to migrate after delivery from the rectum to the vagina, and that there it died and became putrid.—*London Lancet*.

FISSURED NIPPLES

Scarff recommends for fissured nipples the following application:

R	Balsami Peruviani.....	f℥ ss
	Tincturæ arnicæ.....aa	f℥ ss
	Olei amygdalæ dulcis.....	f℥ j
	Aquæ calcis.....	f℥ ss

M. Ft. linimentum. S. Apply locally.

—*Journal de Med.*, Jan. 25, 1890.

THE TREATMENT OF SYPHILIS DURING PREGNANCY.

Besnier (*Journal de Medicine*, November, 1890), has obtained good results in the treatment of syphilis, during pregnancy, by the administration of cinchona wine and syrup of the iodide of iron as tonics, together with nourishing food. The patients also took a daily pill containing one-sixth of a grain of bichloride of mercury, combined with one-twelfth of a grain of extract of opium and one twelfth of a grain of extract of gentian, the whole rubbed up with glycerine. Iodide of potassium was also advised in amounts of from seven and a half to fifteen grains daily.—*American Journal Medical Sciences*.

Editorials, Reviews, Etc.

PUBLISHER'S NOTICE.—The JOURNAL is published in monthly numbers of *Forty-eight pages*, at one dollar a year, to be always paid in advance.

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All communications for the JOURNAL, books for review, exchanges, etc., should be addressed to the Editor.

REPORT ON MEDICAL EDUCATION.

The Seventh Report on Medical Education of the State Board of Health of Illinois is a most comprehensive and exhaustive series of recent progress in medical education. The information it contains is most gratifying in that it shows an unmistakable advance in the right direction, in every quarter of the land. The system of medical education in this country has been for years radically imperfect, and all efforts to change it for the better deserve the highest commendation. The annual reports of the State Board of Illinois have, there can be no doubt, done much towards encouraging, even compelling in some quarters, wished for changes, but the tendency of the profession has been gradually growing stronger and stronger towards the urgent necessity of elevating the standard of medical education. Medical colleges, by slow degrees it is true, have increased the requirements for the degree, and lengthened the course of study. In a few instances colleges in the Northeast, in Philadelphia and New York, have adopted courses which, both as regards preliminary

requirements and more extended courses, are certainly advanced, and yet such colleges have gained, not lost, by the move.

While there can be no doubt that the ideal form of medical education is still far in the future, owing to the plan of organization, and the modes of conducting medical colleges at the present time, it is interesting to note that many important changes for the better are being gradually adopted by many colleges from year to year. Figures in this Report show a most gratifying progress, as may be seen from the following:

“In 1882 the number of colleges requiring certain educational advantages for matriculation was 45; in 1886, 114; in 1889, 117; in 1890, 124; and in this Report, 129.” And these figures are made up of the 148 medical colleges in existence in the United States—a remarkably fair showing. So in reference to the number of colleges requiring three or more courses before graduation, in 1882, 22; in 1886, 41; in 1889, 47; in 1890, 64; in this Report, 85. The duration of the term of lectures has also been gradually increased.

A feature of the greatest interest in this Report is the work of various State Boards of Medical Examiners. In the United States there are thirty-two examining boards, the character of whose work may be judged of by the percentage of rejections before the following boards: Alabama rejected of graduate candidates 7.84 per cent.; Minnesota, 29.81 per cent.; New Jersey, 9.09 per cent.; North Carolina, 20.64 per cent.; South Carolina, 28.82 per cent.; Virginia, 29.51 per cent. As would be naturally inferred the percentage of rejections of non-graduates is considerably higher. The Report very properly urges that the various Boards of Examiners adopt uniform examinations, as might be done by annual conventions of the Boards, in order to arrive more accurately at the qualifications of students graduating from the various colleges.

The list of colleges that now require, or will require in a specified

time, more courses and a longer time of study has grown considerably, as shown by the following extract: "There are 34 colleges that now, or will soon, require four years' study and three courses of lectures; 11 that now, or will soon, require four years' study; 4 that have, or will soon have, four courses; and 17 that will require three courses of lectures in the fall of 1891 or 1892, exclusive of these having these requirements now."

The Report predicts that "within another year at least 100 colleges in this country will require four years' study."

"That portion of the Report devoted to institutions and regulations in foreign countries contains in full the requirements of the examining boards in Great Britain, with the names of all the medical schools and all of the hospitals in which instruction is given. The requirements as to preliminary education in foreign countries are given for the purpose of comparison, as well as the requirements for graduation and for the license to practice. The course of study and the semesters in which the various subjects should be taken up, as advised in the German universities, as well as a description of the German method of examining for the license to practice, are given in full. In addition, the correct names and locations of foreign medical institutions are given."

In regard to colleges requiring preliminary examination before entering upon medical courses, we are heartily in accord. There can be no doubt but that many students commence the study of medicine without the necessary educational advantages. Such a class should undoubtedly be excluded. If any study demands the fullest and most complete collegiate education it is certainly that of medicine. We cannot agree, however, with the preparatory course approved of by the Report, and adopted by the University of Michigan, for the study of medicine. We fail to see how a knowledge of French and German can aid the student in the acquisition of medical knowledge, the language of which is derived from the dead languages. We believe that the collegiate classical course is the one that best fits the student for the study of medicine, if not on account of the fact that scientific nomenclature is based upon the Latin and Greek, at least because that course best trains

the mind for study of such a comprehensive subject as that of medicine.

The thanks of the entire profession are due the Illinois State Board of Health for this painstaking resume and exposition of the true status of medical educational institutions, and for the laudable aim by which it is animated to elevate the standard of medical education in this country.

TENNESSEE STATE MEDICAL SOCIETY.

The Fifty-Eighth Annual Meeting of this society will be held in this city, three days, commencing April 14th. An unusually attractive programme has been arranged and distributed by the energetic Secretary, Dr. D. E. Nelson. Reduced railroad and hotel rates have been secured. The local committee has arranged, among other enjoyable things, a concert for the evening upon which the President delivers his address, the management of which has been entrusted to Mrs. A. H. Stewart. The committee of arrangements has been unusually active in its efforts to make the meeting a successful one, and great pains have been taken to make the visiting physicians feel at home and have a good time. We earnestly hope that the profession of the State will respond to the stirring call of the Secretary and attend in a large body.

The programme of essays, and the list of members appointed for discussion is too long to be published in this issue, but we can assure our readers that the topics selected, and the authors who will present papers, will insure a most instructive meeting.

At the last meeting of the Nashville Academy of Medicine and Surgery a very interesting paper upon Syphilis of the Eye was read by Dr. G. W. Hale of this city which we hope to present in the next number of the JOURNAL.

FIRE AT THE INSANE ASYLUM.

March 13th the western wing of the Tennessee Hospital for the Insane, near this city, was destroyed by fire and eleven inmates burned to death. The fire took place about eleven o'clock, and had made fatal headway before it was discovered. One of the patients who occupied that portion of the building is supposed to have started the fire. The accomplished Superintendent, Dr. Callender, and his efficient assistant, Dr. Beauchamp, with a corps of assistants, did most gallant work in fighting the flames, and succeeded in confining the fire to the wing destroyed. Among the victims burned to death was Dr. Hollowell, well known to the profession throughout the State, and for a number of years superintendent of the Nashville City Hospital. He lost his mind as the result of a severe attack of inflammation of the brain, a few years since. A gallant soldier during the war, a faithful physician and a Christian gentleman, his death will be sincerely deplored by all who knew him.

We beg our friends to call the attention of their professional friends to the improved form of the JOURNAL and the low price of subscription. Do us the favor to help us to make our circulation the largest of any Southern journal.

We call the attention of our readers to reading notices of our advertisers in the last pages of the JOURNAL.

We will publish in our next number a list of papers which have been promised us during the coming year.

We would remind our readers also that short practical articles sent the JOURNAL will be very acceptable.

MEETING OF THE NATIONAL ASSOCIATION OF RAILWAY SURGEONS.

At the Kansas City meeting of the National Association of Railway Surgeons, last year, it was decided to hold the next meeting at Buffalo, May 7th, 8th and 9th of this year. But on account of the meeting of the American Medical Association being set for the same time, it has been decided to change those dates, and to hold our next meeting at Buffalo, April 30th, and May 1st and 2nd, to which all Railway Surgeons are cordially invited. To all Railway Surgeons sending their names and addresses to the Corresponding Secretary, a copy of the Constitution and Programme will be sent. All those wishing to read papers should send in the titles of their papers without delay.

For further information inquire of

A. G. GUMAER, M.D.,
Corresponding Secretary, Buffalo. N. Y.

The Mississippi Valley Medical Association will hold its seventeenth annual session at St. Louis, Wednesday, Thursday and Friday, October 15, 15 and 16, 1891. A large attendance, a valuable program and a good time are expected. The members of the medical profession are respectfully invited to attend.

C. H. HUGHES, M. D., President,
500 N. Jefferson Avenue, St Louis.
E. S. McKEE, M. D., Secretary.
57 West Seventh Street, Cincinnati.
I. N. LOVE, M. D., Chair. Com. of Arrang.
301 N. Grand Avenue, St. Louis.

RESOLUTIONS ON THE DEATH OF DR. B. A. MORTON, OF BLOUNT COUNTY, TENN.

At a regular meeting of the Blount County Medical Society, which convened at the office of Dr. A. B. McTier, on March 2, 1891, a committee was appointed to express the sense of this Society in relation to the death of Dr. B. A. Morton. The fol-

lowing preamble and resolutions were submitted by the committee and unanimously adopted by the meeting:

WHEREAS, It has pleased the Divine Ruler of the Universe to remove from time to eternity our brother physician, whose death occurred on the 27th day of February, 1891.

THEREFORE, be it resolved :

1st. That in the death of Dr. B. A. Morton, this society has lost one of its most highly esteemed members, a man of culture and possessing a high sense of professional honor.

2nd. That this society feel it to be their duty as well as pleasure to protect the life and character of those who were so near and dear to it.

3rd. That we extend to the family and relatives of our deceased brother our sympathies in their hour of bereavement.

4th. That a memorial page be left in the secretary's book and a copy of these resolutions be placed thereon.

5th. That a copy of these resolutions be sent to the family of our deceased brother and also to the NASHVILLE JOURNAL OF MEDICINE AND SURGERY and to the Southern Practitioner for publication.

R. B. MCBATH, M.D., SEC.

JOHN K. BLANKENSHIP, M.D.

THOS. BROWN, M.D.

BOOK NOTICES.

KOCH'S REMEDY in Relation Especially to Throat Consumption. By LENNOX BROWNE, F.R.C.S., ED., Senior Surgeon to the Central London Throat, Nose, and Ear Hospital; Author of the "Throat and Nose, their Diseases, etc." Illustrated by thirty-one cases and by fifty original engravings. Philadelphia: LEA BROTHERS & Co. 1891.

In view of the general excitement that has prevailed, and still prevails, in the profession over the probable results of Koch's discovery, it will be putting it mildly to say that the appearance of this work, emanating as it does from an author well known to the profession, will be hailed with delight, as it is the first methodical arrangement in book form of facts hitherto only to be obtained from current literature. The author is recognized as an authority in his specialty, and the application by him of Koch's remedy in the treatment of throat complications will furnish an experience of the utmost value, not only to the specialist but also to the general practitioner. The tone of the book is conservative,

as indeed it should be in view of the fact that sufficient time has not yet elapsed to allow of a positive estimate being set on the value of the remedy. A point of noteworthy interest concerning this treatise is that the details of administration of the remedy and the general phenomena of its application are such that it will serve as a guide to those desiring to adopt the treatment in general as well as local tuberculosis.

THE DAUGHTER; HER HEATH, EDUCATION AND WEDLOCK. Homely Suggestions for Mothers and Daughters. By WILLIAM M. CAPP, M.D. Philadelphia and London: F. A. Davis, publisher. 1891.

This is a most useful book, and deserves a wide circulation. Information of the kind furnished in this volume is often sadly wanting in families, and it will serve as a most valuable supplement to the visits and advice of the family physician. It should be in the hands of every mother.

?QUIZ-COMPENDS? No. 7. A COMPEND ON GYNÆCOLOGY. By HENRY MORRIS, M.D., late Demonstrator of Obstetrics and Diseases of Women and Children in the Jefferson Medical College, Philadelphia, etc. With forty-five Illustrations. Philadelphia: P. BLAKISTON, Son & Co., No. 1012 Walnut Street. 1891.

This compend will prove of incalculable service to the student in his preparation for examination and his reading after lectures. It is an achievement of recent years only for an author to compress in as limited a space, and in such intelligible form, subject matter hitherto requiring volumes.

The compend is especially valuable, and unusually well prepared. It is illustrated with forty-five fine illustrations, which are well selected and well executed. It is a gem in point of brevity, clearness and completeness,

DISEASES OF THE DIGESTIVE ORGANS in Infancy and Childhood, with Chapters on the Investigation of Disease; the Diet and General Management of Children, and Massage in Pædiatrics. By LOUIS STARR, M.D., late Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania; Physician to the Children's Hospital, Philadelphia; Consulting Pædiatrist to the Maternity Hospital, Philadelphia, etc. Second Edition. Illustrated. Philadelphia: P. BLAKISTON, SON & CO., No 1012 Walnut Street. 1891.

The second edition of this valuable little work appears enlarged

and improved. The importance of the subject can not be over-estimated. The deaths of a large majority of children between birth and the seventh year of life are due to errors of digestion resulting from faulty feeding. Any work that will assist the practitioner in conveying his little patients out of the quicksands of digestive diseases should be welcomed by the profession. We know of no similar work that will be of greater aid in accomplishing this than this excellent volume.

No. 8 in the Physicians' and Students' Ready Reference Series.—

DIABETES: Its Causes, Symptoms, and Treatment. By CHARLES W. PURDY, M.D., Queen's University, Honorary Fellow of the Royal College of Physicians and Surgeons, Kingston; Member of the College of Physicians and Surgeons of Ontario; Author of "Bright's Disease and Allied Affections of the Kidneys;" Member of the Association of American Physicians, of the American Medical Association, of the Chicago Academy of Sciences, of the Illinois State Microscopical Society, etc., etc. With Clinical Illustrations. Philadelphia and London: F. A. DAVIS, Publisher. 1890.

This will prove a most entertaining as well as most interesting treatise upon a disease which frequently falls to the lot of every practitioner. The work has been written with a special view of bringing out the features of the disease as it occurs in the United States. The author has very judiciously arranged the little volume, and it will offer many pleasant attractions to the practitioner. The author's object, as expressed in the preface, "is to furnish the physician and student with the present status of our knowledge on the subject of diabetes in such practical and concise form as shall best meet the daily requirements of practice, as they seem to me from a careful study and recorded observation of the disease extending over a period of twenty-one years."

PUBLISHER'S DEPARTMENT.

POPULAR FAITH IN ALTERATIVES.

Since the nature of the action of this class of remedies is to some extent as yet undetermined and obscure, they are necessarily prescribed empirically. To this fact is perhaps due the promiscuous use by the public, not infrequently with the endorsement of physicians, of a host of nostrums of no real medicinal value. Many of these have had an enormous sale—indicative not so much of their worth as of the general belief in the necessity for the use of what are popularly termed “blood purifiers.” Spring is the season when these are most generally resorted to.

When we consider that there is no condition of disease at some stage of which tonic alteratives are not indicated, it will be appreciated that next to agents such as opium and quinine, the action of which is specific, no class of remedies are more frequently demanded.

Messrs. Parke, Davis & Co. supply under the name of Syrup of Trifolium Compound, an alterative formula containing red clover, stillingia, cascara amara, burdock root, poke root, prickly ash bark, berberis aquifolium, all valuable vegetable alteratives, either with or without potassium iodide. This has been used by physicians with much success in all conditions requiring alterative treatment.

SYR: HYPOPHOS: FELLOWS.

(Dispensed in Bottles containing 20oz. by weight and 15 oz. by measure).

Mr. Fellows takes this opportunity to thank the Profession for their increased recognition of his invention.

To the medical gentlemen who have kindly permitted the publication of their testimony in favor of his Hypophosphites, and who, by letter or otherwise, have expressed their disapproval of the fraudulent imitations, he is especially grateful.

With its increasing favor there has been a corresponding increase of imitations, and though this is a compliment in the sense that “only the best things are worth counterfeiting,” yet Mr. Fellows would respectfully request the profession to guard against the misleading advertisements and fictitious compounds of notorious imitators.

SAFEGUARDS AGAINST SUBSTITUTION.

Fellows' Hypophosphites is dispensed in bottles containing 15 oz. by measure—the address, Fellows & Co., St. John, N. B., blown on—the name, J. I. Fellows, St. John, N. B., in watermark upon the yellow wrapper; it is hermetically corked, and sealed with crimson capping; is heavy, slightly alkaline, has a pleasantly bitter taste, and deposits a flocculent brown precipitate of hypophosphite of manganese when left undisturbed for forty-eight hours.

Note.—Though this precipitate mars the appearance, its presence has been found imperative to its full effect.

JAMES I. FELLOWS, Chemist,
48 Vesey Street, N. Y.

Bromidia is used more to-day than ever. It is reliable and never fails in its action.—CANADA LANCET, January, 1891.

TONGALINE IN SCARLET FEVER.

Dr. I. N. Love has had remarkable success with the employment of tongaline as a stimulator of the glandular system. He finds that the kidneys and glands of the alimentary canal respond favorably to the use of this preparation in doses of from one-half to a teaspoonful every three hours when indicated. He is in the habit of using the following formula:

R. Tongaline (Mellier).

Syr. tolu, aa.....f $\bar{3}$ i.

Elix. lactopeptin,.....f $\bar{3}$ ii. M.

Sig.—Dessertspoonful every two to four hours. as demanded.

The writer says that tonga is indicated in scarlet fever, and the salicylic acid, which forms a part of the compound, is surely advantageous, and the small amount of pilocarpine therein is also of great value.—*Annals of Gynecology and Pædiatry*.

NEW ADDITIONS TO REMEDIAL AGENTS.

Among some new and convenient medicaments Parke, Davis & Co. announce are Mosquera's Beef Peptone, Malt Extract with Peptone and Urethral Bougies of Aristol.

Mosquera's Beef Peptone is entirely free from the bitterness of the Pepsin Peptones, possessing an agreeable, sweet taste.

Nutrition plays so important a part in modern therapeutics that any additions to eligible methods of nutrition are welcome. Malt Extract with Peptone makes an easily assimilable, highly nutritious combination of malt.

Aristol is regarded by many as quite as efficient as iodoform in its antiseptic action, and it possesses the special advantage of being entirely free from odor. The Aristol Bougies should find a wide application in the antiseptic treatment of the urethra. Aristol is a substitute production of thymol obtained by mixing a solution of iodine in iodide of potassium with an alkaline thymol solution.

A PLAIN STATEMENT.

HAYERHILL, MASS., March 7th, 1891.

ANTIKAMNIA CHEMICAL Co., St Louis Mo.

Gentlemen: The Antikamnia sent me found a suitable case at once. My patient had long been a sufferer from hemicrania, and the pain was never more than partially relieved by caffeine, acetanilid, etc.

Upon the recurring attack I prescribed Antikamnia, three grains every two hours. The first dose gave instant relief, to the great satisfaction of both myself and patient, and complete recovery was secured.

I shall hereafter use Antikamnia in preference to all other preparations, for the relief of migraine, sciatica, and other nervous diseases.

Very respectfully yours, CHAS. F. FOYE, M.D.

We call the attention of our readers to the advertisement of Robinson-Pettet Co., Louisville, Ky., which will be found on another page of this issue. This firm was established forty-five years ago, and enjoys a widespread reputation as a sound, honest, reliable business house. We do not hesitate to endorse their preparations as being all they claim for them.

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C. S. BRIGGS, M. D., EDITOR.

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Original Communications.

A CASE OF SUCCESSFUL TREPHINING OF THE SKULL
FOR EXTRAVASATION FROM PROBABLE RUPTURE OF THE RIGHT LATERAL SINUS,

BY C. S. BRIGGS, M.D.,

Professor of Surgical Anatomy and Operative Surgery in the Medical
Department of the University of Nashville and of
Vanderbilt University.

John H., white, carpenter, 51 years of age, in a difficulty Dec. 2, 1890, at 11 o'clock, a.m., received a number of severe blows upon the head from a loaded whip-handle in the hands of a powerful negro man. He was knocked down several times, but was able to walk off unaided, and an hour and a half after the fracas, walked home, a few squares distant, apparently but little the worse for the affair. The only mark of the fight was a small lacerated wound situated over the right temporo-parietal region. At 5 p.m. Dr. Charles L. Eves was called to the case. He found a ragged scalp-wound situated as above described, the patient

conscious, suffering but little pain, and able to give a clear account of the difficulty. Dr. Eves sutured the wound and applied antiseptic dressings. Shortly afterward the patient became restless, talked at random, became more and more stupid, and finally, two or three hours after Dr. Eves left, became comatose. At 10 p.m. the Doctor was called again, and found him completely comatose; respiration slow and stertorous; pulse 40 to the minute; temperature not taken; left hemiplegia complete, and right pupil markedly dilated and irresponsive to light. Recognizing the existence of grave cerebral mischief, the Doctor explained the probable necessity for operative measures, and made preparations accordingly. Dec. 3rd, at 10 a.m., I was called to the case with Drs. Eves and Bonner. In consultation it was agreed that the compression of the brain was due to extravasation of blood complicated with fracture of the skull. The conclusion reached was based upon the marked interval between the time of receipt of the injury and the development of the coma. The scalp was shaved, and rendered thoroughly aseptic. Ether was sparingly administered. A probe passed into the wound detected roughness, but no marked depression.

A horse-shoe shaped flap of skin with the convexity directed backward, and of a width at the base of two and a half inches was made so as to include the wound in its center. The skull was found to be cracked without displacement, the lines of fracture extending two and three inches in several directions and intersecting each other. An inch trephine was applied over the juncture of the lines and a crown of bone removed, the point of application being about an inch above and half an inch in front of the pinna of the ear.

A dark, firm clot was exposed, which could not be removed through the opening. The trephine hole was enlarged with the rongeur forceps in all directions until it measured two and a half in its long by about two inches in its short axis. The clot was then removed with the fingers as far as they could reach, and was found to be over an inch in thickness. It extended in all directions covering the entire right half of the cerebrum.

The flat end of an aluminium probe was bent into a hook by means of which portions of the clot extending far under the skull were broken up and as much of it as possible removed in this

manner. A stream of 1-2000 bichloride solution from an irrigator was used to wash out detached fragments of the clot, until as much as possible had been removed. The effect of the removal of the coagulum upon the depressed brain was not very apparent at first, as it was still separated from the skull by a considerable space. Pulsation returned but was barely perceptible. Fresh hemorrhage from some small branches of the middle meningeal artery in the exposed dura mater took place, which was checked with considerable difficulty. Brisk bleeding also occurred from two vessels of the diploe, which was controlled by plugging the canals with soft pieces of wood.

At several stages during the extended operation the patient's condition became alarming, necessitating artificial respiration and hypodermic administration of brandy and ether.

After the patient had reacted somewhat, hemorrhage recurred in alarming quantity, seeming to well up dark and apparently venous from the posterior, not lateral aspect of the skull. The dark color of the blood and the direction from which it came, precluded the idea of the middle meningeal artery as its source, and led to the belief that it proceeded from a rupture of the right lateral sinus. Whatever the source of the blood, it was easily apparent that unless promptly checked the patient would die on the table of hemorrhage. The desperate nature of the case demanded desperate remedies. Acting on the presumption that the bleeding was from a ruptured sinus, a half-dozen aseptic sponges, about the size of walnuts clamped in as many hæmostatic forceps were one after another passed between the still sunken surface of the dura and the skull as far as possible. The hemorrhage being repressed by this manœuvre, the handles were left protruding from the wound. All bleeding having been thus entirely checked, the wound was dressed antiseptically and the patient removed from the operating table to his bed.

On the following day the patient's condition was greatly improved. No recurrence of hemorrhage. Pulse 110, temperature 101°, bowels moved with enema, urine drawn with catheter. Responded to questions, and asked for tobacco.

December 5th, temperature and pulse the same. No hemorrhage. Patient more restless. In the afternoon the sponges were removed, after irrigating the wound thoroughly with bichloride

solution. Alarming hemorrhage at once took place, dark blood rapidly welling up apparently from the posterior aspect of the opening in the skull. The space between the dura mater and the skull was at once tamponed firmly with iodoform gauze, and the hemorrhage was again effectually controlled.

December 6th, no material change in the patient's condition occurred, except that he became delirious, and more difficult to control. Pulse and temperature showed little variation.

December 7th, seventy-two hours after the removal of the sponges, the gauze tampon was, after thorough irrigation, carefully removed, and was not followed by hemorrhage. The brain had now nearly reached its level, and pulsation was more distinct.

On the tenth day, under the impression that an abscess had formed, pulsation having again become almost imperceptible, a small Von Graefe cataract knife was passed some distance into the brain, but only with the result of permitting the escape of some blood-stained effusion which followed the withdrawal of the knife with some force.

The subsequent history of the case was uneventful. The wound was dressed daily, especial care being taken to irrigate the cavity thoroughly, and to provide adequate drainage. The paralysis slowly disappeared, that of the arm still persisting in a modified degree. His intellect was gradually restored, his memory however being still deficient. The opening still discharges pus freely, though it is now nearly closed. The vision of the right eye is nearly destroyed. Patient walks with little difficulty, but the power of the left arm is still imperfect.

An ophthalmoscopic examination by Dr. George H. Price resulted as shown in the following report:

Patient's general appearance as to his eyes, normal; vision in left being about 20-20, in right eye total blindness. Upon inspecting the pupils that of the right eye seems slightly larger than in the left, responding feebly to strong light, which response seems indirect, globe normal in position and movements. The ophthalmoscope shows media clear, disc pale-bluish tint, slight physiological cup, blood vessels small, about one-fourth the usual size, no marked atrophic excavation of disc.

From the forgoing, and the history as given by Dr. Briggs, the conclusions as to the immediate cause of the amaurosis are of interest to us. At present it is generally conceded that there are but two or three conditions which would result in the total suspension of vision in one eye, leaving the

other unaffected. These are traumatism and pathological changes, either primary or secondary—immediate or remote—and embolism of central artery of retina. The condition of the eye at this time, and history of good vision up to the time of injury being inflicted, would exclude the theory of primary, immediate or remote pathological changes, also embolism, and leave only the factor of traumatism with secondary pathological changes for consideration. As to the location of traumatism relating to vision it is evident that, if the injury had been central, or in the optic tract, or in the central part of the chiasm, we should find the patient suffering from hemianopsia. Again, if the lesion had been purely central then the atrophy would not be present.

There is no history, nor present manifestation, of hemianopsia, but there is atrophy, hence I am led to conclude that the injury sustained was in that portion of the optic apparatus known as the optic nerve proper or anterior to the optic chiasm.

As to the nature of injury to the optic nerve, I concluded it was a laceration of the nerve or hemorrhage into the sheath of the nerve, owing to a fracture of the roof of the orbit in line of the optic foramen, which according to Berry and others is common in such cases. The condition of atrophy does not obtain at first and in all probability if the patient has been examined sooner the inflammatory stage preceding the atrophy would have been discovered.

The prognosis is of course very unfavorable, being more so in cases which are unilateral.

Compression of the brain due to extravasation of the blood is one of the most frequent causes of death after cranial injury. The frequency of intracranial hemorrhage following injury of the head is easily understood when one reflects upon the great vascularity of the brain, the numerous arteries that traverse the grooves on the inner surface of the skull, the number of large venous sinuses, etc. Hemorrhage may complicate fractures of the skull, the fracture line traversing these grooves or large vessels of the diploic structure, or may depend upon laceration of the brain substance, upon penetrating wounds of the brain by which the vessels are directly wounded, or upon rupture without fracture, by indirect violence of important arteries, venous sinuses or numerous capillary vessels of the brain substance itself by concussion from blows inflicted with great violence.

In the case reported the hemorrhage was undoubtedly due to rupture of a large vessel. The exact source of hemorrhage, however, is uncertain. In the majority of cases of extravasation of blood the bleeding is from rupture of the anterior branch of the middle meningeal branch of the internal maxillary artery, but in

this case a number of circumstances oppose the idea of the hemorrhage being from that source. 1st, The dark color of the blood. 2nd, The direction from which it came was posterior, not lateral. 3rd, The ease with which pressure controlled the hemorrhage. Reported cases of extravasation from ruptured meningeal arteries prove that pressure is inadequate to control the hemorrhage. 4th, Authorities contend that hemorrhage from rupture of the meningeal artery is attended with a bloodless condition of the bones of the skull. In this case hemorrhage from the diploic vessels was so profuse as to necessitate plugging the canals to stop it. These circumstances incline us strongly to the belief that the extravasation in this case was due to rupture of the right lateral sinus.

Statistics of wounded cerebral sinuses are extremely meagre, especially so as being the origin of extravasation. Until recently surgeons have been taught to avoid operating in the vicinity of the larger venous sinuses of the brain, but at the present time such a caution no longer obtains.

Wounds of the sinuses frequently occur accidentally as the result of surgical operations, and the hemorrhage resulting is easily controlled by pressure. In the practice of Dr. W. T. Briggs and myself, both the superior longitudinal and the lateral sinuses have been wounded in a number of cases in trephining operations, and yet no untoward results followed, moderate direct pressure in all cases being all that was needed to repress the hemorrhage. The fact that moderate pressure in the direction of the lateral sinus in the case reported served to stop the flow of blood, whilst in other cases in which the hemorrhage was known to proceed from the ruptured or wounded middle meningeal artery pressure failed to control the hemorrhage, would go far toward supporting the presumption that the extravasation was from a ruptured lateral sinus.

The method of controlling the hemorrhage in this case presents an interesting feature. To enlarge the cranial opening further in search of the bleeding point was inadmissible. To make a second trephine opening in a blind search for the source of the hemorrhage would have been unjustifiable. The only procedure left to prevent immediate death from hemorrhage was the tamponnade which fortunately was successful. This method of treatment is

not unique. Dr. Elliott, of Boston, Mass., several years ago, reported a case in which he plugged the cavity for intracranial hemorrhage with a number of sponges and succeeded in saving his patient's life. The hemorrhage recurred on the removal of the sponges, and was a second time checked by the sponge tampon.

The case is instructive as demonstrating the wonderful tolerance of the brain to prolonged manipulation and to the presence of foreign bodies. For nearly four days the brain was compressed first by sponges and then by a packing of iodoform gauze, and yet no immediate signs of cerebral inflammation nor remote evidences of organic trouble manifested themselves. The case forcibly illustrates the sententious paraphrase by Liston of the Hippocratic axiom, that "*No injury of the head is too slight to be despised nor too grave to be despaired of.*"

EXPERIMENTS WITH KOCH'S LYMPH CONDUCTED AT THE NASHVILLE CITY HOSPITAL.

BY WADE STACKHOUSE, M.D., HOSPITAL INTERNE.

Through the kindness of Prof. W. T. Briggs, the City Hospital was furnished some Koch's lymph, March 1st, and its use on patients was commenced at once. The solution injected contained one per cent. of the pure lymph. The injections were made with the special syringe which Koch devised. All three of the patients were colored females, and they seemed glad of the privilege of having the lymph used on them. It will be observed that the injections were smaller than were at first recommended.

CASE I.—Willie Moss; disease, scrofula; age, 21; physique, not good. Her family history shows scrofula to be hereditary. A brother has scrofula.

At the time lymph was commenced she had a number of scrofulous enlargements on both sides of her neck, and there was a notable tumor beneath the skin, which was discharging. Her appetite was good, and she was not confined to bed. She was then taking a mixture of equal parts of cod-liver oil, syr. hypophos. co. and spirit. frumenti, ʒiv , t. i. d., and this was continued during injection of lymph. Excepting remedies to regulate her secretions, no other medicines were given during the use of lymph. No local applications were made to the enlargements.

The first injection of 1 c. c. of diluted lymph was made March 1st. Her temperature then being normal. Her evening temperature was 1° above normal. The second injection caused the highest rise of temperature, reaching $101.4\text{--}5^{\circ}$. Injections were made daily, giving little or no reaction, until March 7th, when the injection was increased to 2 c. c., causing her temperature to rise to $100.2\text{--}5^{\circ}$.

One notable feature of the case has been the abnormal temperature. Since March 7th, her temperature has not been above normal, being with wonderful regularity 97° in the morning, and $98\ 2\text{--}5^{\circ}$ in the evening.

The discharge from the gland beneath her chin ceased soon after the use of lymph was commenced. The glands first softened and then gradually disappeared. She was discharged from the hospital March 21st, and only the cicatrices were left to show where enlargements were.

CASE II.—Mary Baily; disease, scrofula; age 10; physique, good. Her father had scrofula.

At the time use of lymph was commenced she was not confined to bed, and all her secretions were normal. She was given the same medical treatment as Case I, and no local applications were made to gland. The enlargement on the right side of her neck was about the size of a small orange.

An injection of 1 c. c. of the diluted lymph was made March 1st. Her temperature then was normal. Her evening temperature reached $99\ 3\text{--}5^{\circ}$. Injections were made daily, the second one causing her temperature to rise to 101° , and after this there was little or no reaction till March 7th, when 2 c. c. of lymph were injected, causing her temperature to again rise to 101° . Injections were discontinued March 21st, on account of varicella.

Under the use of lymph, the enlargements softened and gradually became less. March 21st the hospital staff judged the enlargement less than half its size when lymph was first used. No injections have been made since March 21st, and now (April 6th) the enlargement is inflamed, and is about two-thirds of its original size.

CASE III.—Harriet Taylor; disease, disseminated pulmonary phthisis; age, 16; physique, very poor. Family history obscure.

When use of lymph was commenced she was in an advanced stage of the disease, being confined to her bed most of the time. Her appetite was poor, and she had considerable diarrhoea. She took the same medicinal treatment as Case I, and besides was given milk punch and concentrated diet. Her evening hectic was quite marked, and perhaps explains the greater variations of her temperature than of preceding two cases.

The first injection of 1 c. c. of diluted lymph was made March

2nd. Her temperature was then 100° (10 a. m.). Her evening temperature reached $104\ 2\cdot5^{\circ}$. After third injection, her temperature ran down to 97° , and being injected again her temperature ran up to 105° . This made a total variation of temperature for fourth injection of 8° . Injections were made daily, but after the fourth injection her temperature wave seemed but the fluctuation due to hectic, remaining very constant between normal and 101° .

After commencing use of lymph her appetite got better, her night sweats became less, and her diarrhoea improved. But notwithstanding the apparent improvement in her subjective symptoms, she continued to emaciate, and died March 19th. Though very feeble during whole time lymph was used, it caused not the slightest headache, malaise, or other symptom whatever, save variations of temperature; and the same can be said of the two preceding cases.

KOCH'S LYMPH IN LUPUS.

Mr. R.; age, 67; white; physique, good. His father, a sister, and a brother died of consumption, and also grandmother on father's side. He came in hospital August 9th. The eye-lids and other appendages of left eye at that time had been destroyed by the disease.

□ In 1860 there was a growth like a seed wart beneath lower lid, and in 1862 he had this burned out with caustic. It did not return for four years, at the end of which time it reappeared and grew slowly till 1876 when it was again burnt out with caustic. It reappeared in three years, and was again burned with caustic in 1884.

When he entered the hospital, it appeared as an eating ulcer, showing inflammatory action, except on the side of his nose where it was covered with a scab. The left eye had turned up under the orbital process of the frontal bone, owing to the effects of the disease on the muscles, but it could be pulled down with the finger and is still capable of vision.

The first injection of lymph was made April 7th, and caused his temperature to rise from normal to $99\ 4\cdot5^{\circ}$. The injections April 15th and 16th caused his temperature to rise to 101° , but after each injection the temperature has gone down to normal. Injections of 4 c. c. of diluted lymph have been made daily,

the only subjective symptom produced being soreness at the points of injection.

Now (April 17th) all inflammatory symptoms have disappeared from the eye, and the purulent discharge has ceased. Its eating and spreading tendency has evidently been checked. Considering the short time the lymph has been injected, the improvement has been more notable than in any of the cases we have hitherto injected.

TYPHOID FEVER COMPLICATED WITH JAUNDICE.

Dr. R. L. Macdonnell writes to the Montreal Medical Journal for April as to the rarity of jaundice as a complication of typhoid fever. He himself has had only one case that he can recall. In this case the patient was pregnant and there was an overloaded colon, so that a mechanical cause may have produced the icteric symptom. In Pepper's "System of Medicine" the author of the article on Typhoid Fever states that he had never seen this complication, and is inclined to think that it is very rare in this country. Murchison met with only three cases, all of which were fatal, although in two the jaundice had disappeared before the patients succumbed. Although, the cases collected by him numbered only nine, all save one, were fatal. Greisinger had seen jaundice ten times in six hundred cases of fever, and several of them ended in recovery; Liebermeister, six cases in fourteen hundred and twenty; and Hoffman, ten in two hundred and fifty.—*N. Y. Med. Journal.*

A CASE OF SYMMETRICAL GANGRENE.*

BY REGINALD STONESTREET, M.D., NASHVILLE, TENN.

Notwithstanding the fact that a great deal has been written about "Symmetrical Gangrene" since 1862, when Raynaud first described the disease and gave it his name, I have concluded to report a case occurring in my practice within the first two weeks after graduation. It may serve as a stimulus to my fellow graduates, and also show that one never knows when an unexpected case, or type of disease of rare occurrence will be confronted, and regular and constant reading be of benefit.

I had set myself the task of reading a chapter each night on nervous diseases, feeling that they were many and my knowledge of them limited. I had just read Starr on "Vasomotor and Trophic Neuroses," when my preceptor (now partner), Dr. Blackman, invited me to see a peculiar case, which he described. I was at once struck with the thought, this is "Raynaud's Disease," but some of the symptoms were so marked as to lead him and other prominent physicians, as well as the patient and her friends to believe that she was suffering from some lesion of the spinal cord, which might probably lead to locomotor ataxy.

The patient is 55 years of age, mother of several children, good family history, and up to last year or two had been remarkably free of ailments of all kinds. This was the second attack within eighteen months, and each was similar in its history, except that the first was comparatively light.

The case briefly reported and taken from my notes was as follows:

Attack sudden, or seemingly so, beginning with a total derangement of the alimentary apparatus. Dislike for food; in fact, complete anorexia, great depression of mind, every now and then sighing, even crying, without seeming cause; sleeplessness; neuralgic pain confined to right side of head. As a consti-

tutional symptom of some prominence, but which I failed to find mentioned by authors at my command, I wish to mention partial aphasia. The patient taking a long while to think what she wished to say, then slowly, and oftentimes using a wrong word, and calling a wrong name. These attacks would pass off, only to recur.

Attention was first drawn to the local lesion by the patient placing her foot to the floor and experiencing a sharp shooting pain. The foot presented nothing extraordinary at first, then a slight œdema with skin a little drawn. Following the pain was inability to use the foot. This inability was what led all to believe the cord to be the seat of trouble. It was the right foot, and in this connection I wish to mention that she complained of her right eye at times being so affected as to be almost blind. She would say that the light gradually died out of it, and as gradually re-appeared.

All the local phenomena generally met with took place in the foot, viz: sluggish circulation, œdema, cyanotic appearance of surface, gangrene of the superficial layers of the cuticle making its appearance in about five weeks, first on the outer side of third toe, then on the outer side of second, and finally a circumscribed spot on the dorsum of the foot to the outer side of the median line. The nails of the affected toes were markedly prominent as a diagnostic feature, becoming horny, thickened and ceasing to grow.

As regards treatment will say that patient could not stand electricity in any form and this reluctantly had to be abandoned. Reliance alone being had to building up the system with usual tonics (*nux vomica* $\frac{1}{8}$ grain t.i.d. giving best results); anodynes to relieve pain etc., and to keeping the foot at perfect rest wrapped in a flannel bandage with repeated sponging of alcohol etc. Hyperæsthesia was too great to admit of massage at first, but as this diminished, resort was had to gentle manipulation in hope of re-establishing the circulation, which I am happy to say is now very apparent.

The fact that all the phenomena, local as well as general, were restricted to the right side makes this case exceptional, I think, for in those cases reported which I have read I fail to find this fact noted. It would certainly help to disprove the theory of arteritis or endarteritis obliterans and forcibly brings out the central character of the disease in a very strong light.

Proceedings of Societies.

TENNESSEE STATE MEDICAL SOCIETY.

Fifty-Eighth Annual Meeting, held in Nashville, April 14, 15 and 16, 1891. Stenographically reported for this JOURNAL.

FIRST DAY—MORNING SESSION.

The Society met at Watkins Hall, and was called to order by the President, Dr. Geo. A. Baxter, of Chattanooga, at 10:30 a. m. Prayer was offered by Rev. C. D. Elliott, of Nashville.

Dr. T. J. Happel, of Trenton, read a paper entitled *ABSCESSES*. He said this field is a profitable one for thought and investigation, especially in the direction of diagnosis. So far as the treatment is concerned the Latin expression *ubi pus ibi incisio*, gives us the therapy of such cases in a few words, so far as their last stages are concerned. The prophylactic treatment is a different matter. Everything that can be done to prevent pus, to prevent the development of an abscess, must be resorted to, but when pus is present the knife is the instrument for relief. An aspirator can remove the pus itself, but the cause of it, the pyogenetic something is left behind. A free outlet must be given to the pus, the cavity carefully cleaned, perfect drainage secured, arrangements made for thoroughly flushing the diseased organ with antiseptic fluids, the strength of the patient maintained by a generous diet, and nature aided by an abundance of pure fresh air to repair the broken down constitution.

Dr. Happel reported a case of abscess of the spleen. This was

a rare trouble, many of our best authorities never having met with a single case. He had in the course of seventeen years' practice found two cases; one due to pressure upon the organ, and the other to chronic malarial poisoning. He also reported a case of abscess of the cornea forming hypopyon, and one case of abscess of the liver which came under his observation recently. In closing he called attention to the peroxide of hydrogen as one of the best, if not the best, of all agents, used to cleanse and restore to a normal state all pyogenic membranes, surfaces and cavities. As one writer expresses it, "It hunts out pus in all its ramifications as a ferret does a rat."

FIRST DAY—AFTERNOON SESSION.

Dr. George R. West, of Chattanooga, contributed a paper on OVULATION AND MENSTRUATION. Individual opinions and theories are as those who love darkness rather than light and insist upon remaining in darkness rather than to be disturbed by the entrance of facts which might bring light. The subject of ovulation and menstruation, their dependence or independence, is one of these benighted fields where individual opinions and theories run riot, and where the light of facts gained from research and experience is so perverted as to render uncertain the supposed certainty that has previously existed.

After giving a resume of the literature on the subject Dr. West drew the following conclusions:

I. That the increased familiarity with the pelvic organs, the results of modern surgery, has not materially added to our knowledge of their functions.

II. That though the ovular theory of menstruation has not been overthrown, yet the weight of accumulating evidence seems against it.

III. That the most recent observations point to a common nervous origin for both ovulation and menstruation, and yet an individual independence.

Dr. Thomas M. Woodson, of Gallatin, followed with a paper entitled: TREATMENT OF PNEUMONIA; THE PAST AND PRESENT METHODS; HAS THE RATE OF MORTALITY BEEN CHANGED? He briefly reviewed the literature on pneumonia to illustrate the opinions of medical teachers and authors. He was glad that Hare, of

Philadelphia, in his work on "Practical Therapeutics," revived the old lines of treatment. He extolled *veratrum viride*, and said that in the first stage of the disease it is very useful as a medicant. Its two alkaloids possess different influences, and that between them they fulfill every object that is sought after. Jervine, a powerful vaso-motor depressant, relaxes the walls of the blood vessels everywhere, at the same time it quiets the action of the heart by an action over its muscle or ganglia as to reduce its force, thus preventing engorgement of the lung; while veratroidine, by stimulating the inhibitory nerves of the heart, also slows its beat, fills the ventricles and allays excitement. The advantages of *veratrum viride* are its completeness and rapidity of action. The fact that it preserves in healthy blood vessels the blood which may be needed in the crisis if the disease is not aborted, and its safety is a point largely in its favor. He said that in the second stage to prevent heart failure by engorgement from over-distension Dr. Hare gives *digitalis* with strychnine to stimulate the respiratory centers; that he thinks alcohol in the second stage is inferior to *digitalis*, carbonate and muriate of ammonia are valuable adjuncts in the second and third stages. He uses opium sparingly for troublesome cough in the latter stages, and not in the first stage.

In the first stage of croupous pneumonia the indications are clear:

I. To control the circulation and diminish the determination of blood to the lungs.

II. To reduce the temperature if high.

III. Allay pain by rest, physical and physiological.

IV. Support the vital powers.

The first two indications are met by *veratrum viride* better and with more certainty than any other. The third, to allay pain, we have but one remedy—opium or its salts, which stands without a rival. Fourth, to support the patient with special reference to failing heart and respiratory centers, *digitalis*, strychnine and alcohol for the latter stages.

More than twenty years ago the speaker expressed the opinion that in inflammatory affections *veratrum viride* was a sedative of the greatest value, controlling the action of the heart as effectually as blood-letting, without the exhaustion that must follow the loss of blood. Arterial excitement is reduced by it, while the vital

forces are economized. It is especially adapted in pneumonia in the stage of engorgement, in which it appears to bring about prompt resolution. It may be used in the treatment of children with safety. Its constitutional effects having been secured, there is a reduced force and frequency of the circulation, reduction of temperature and respiration, and an amelioration of all the symptoms of the disease. While extolling the virtue of *veratrum viride*, he would not rely on it alone in pneumonia, as opium was unquestionably entitled to a prominent place, palliative and curative in its action, allaying pain, cough and nervous irritation, available in the later as well as early stages.

PHTHISIS PULMONALIS, WITH ESPECIAL REFERENCE TO PROPHYLAXIS, was the title of a paper read by Dr. J. R. Buist, of Nashville. As physicians, impressed with the claims of suffering humanity, we should never relax our efforts as long as consumption, with its multiplied ills, afflicts our race, with its sickness, pain and death. Nor have we any right, as scientists, to despair of the ultimate triumphs of knowledge and the practical results of scientific research. The acknowledged failure of all the proposed plans for the cure of phthisis, based upon therapeutical agents, should lead us upon other lines of effort for its destruction. The impossibility of procuring for the mass of consumptives the benefits of climate and altitude, even if these benefits approximated the value some assign them, should also admonish us to look to the higher plane of preventative medicine in dealing with this disease.

Regarding Koch's tuberculin or parataloid as a remedy for consumption, Dr. Buist said the high expectations so recently excited in these inoculations do not seem to be verified. Certainly for advanced stages of phthisis, and many other conditions of tuberculosis it is unsuited, and positively dangerous; and it is not settled whether any benefit can attend its use in the incipient cases. In making this statement, he would not detract anything from the real value and merit of the discovery, and meant no disparagement of the genius of Koch.

Preventative medicine is after all the acknowledged aim and end of scientific research. Though still in its infancy, it has accomplished wonders for humanity, and it is obvious that its first and highest triumphs are to be won among the class of zymotic and infectious maladies. The power of prevention is incal-

culably more precious than any therapeutical measures. It is therefore highly incumbent upon us individually and collectively, first, to assure ourselves of the modern theory of consumption and so convinced, we should direct our attention and efforts to a rational prophylaxis of this fatal disease.

It may be said that the true difficulty is to get the public to realize its danger from various sources, and still more to have wise prophylactic measures adopted. This in the main is true; yet education can perform wonders. The benefits of sanitary reform are now acknowledged and trusted, although fifteen years ago it met with indifference and opposition. It was thought to be a direct attack upon the rights of the citizen. When first inaugurated in Nashville it encountered opposition from every quarter.

The speaker closed with the words of Dr. E. O. Shakespeare, of Philadelphia: "What can and should be done to limit the prevalence of tuberculosis in man? What use was it for Koch to have made his discovery of the infectious nature of the bacillus tuberculosis, if the practitioners of medicine, those who come in direct contact with the people, who are the natural agents for arousing such a public sentiment and enforcement of laws for the protection of public health, utterly neglect to act upon the ample and exact knowledge which we possess concerning the etiology and prophylaxis of tuberculosis?"

FIRST DAY—EVENING SESSION.

The public were invited to attend this session. Addresses were delivered by Hon. Wm. Litterer, Mayor of Nashville, Hon. H. H. Norman, and Judge J. M. Dickinson. Dr. Geo. A. Baxter also delivered the President's Address, taking for his subject, "Topics of Import to the Profession and Public." The address was scholarly, very instructive, and was listened to with marked attention.

SECOND DAY—MORNING SESSION.

Dr. J. S. Cain, of Nashville, read a paper on CHRONIC ENDOMETRITIS. He said the question as to the localization of the chronic form of endometritis is rendered more prominent than that of the acute form on account of the conflicting opinions entertained by distinguished authors and teachers. None, he be-

lieved, questioned the very frequent occurrence of chronic cervical endometritis, but Drs. Emmett, Bennett and other very distinguished authorities almost absolutely ignored the existence of chronic corporeal endometritis as a special disease, and consequently, except for the relief of hemorrhages and to meet temporary emergencies, discountenance all intra-uterine medication, relying entirely upon treatment directed to the uterine os and vault of the vagina. But the great preponderance of medical authority is averse to the opinions entertained by these gentlemen, and with the latter class he was entirely in accord.

Chronic endometritis and the conditions necessarily allied therewith are the most common as well as the most important diseases with which the gynecologist has to deal. This condition is often a sequel to the acute form of the disease, and grows out of repeated acute attacks. It matters not how or from what source the acute outbreaks originate, whether from catarrhal, specific, traumatic or internal constitutional causes, they are often but not always, the starting point from which not only the endometrium but the entire uterine and peri-uterine parenchymatous structures become involved. He would here venture the assertion, that while the change in structure and function of the lining membrane of the uterus often seem to be the most prominent conditions, and those which demand our first and most careful attention, this tissue is probably never chronically diseased without a corresponding involvement of the entire uterine structures.

Treatment. While the curette, as has been said, is a blind instrument, and capable of doing much harm in careless and incompetent hands, yet for the removal of fungoid vegetations and adenoid degenerations from the endometrium it affords the surest, speediest and safest means yet devised. Dr. Cain is accustomed to follow the curetting by an application of Churchill's tincture of iodine or diluted carbolic acid, as is the usual practice, and always precedes the treatment by a careful washing out of the vagina and uterus with a disinfectant of one or two thousand corrosive sublimate.

In cases where this treatment is not admissible, or where it has failed to afford relief, his next reliance is on the electro-chemical action of negative galvanism, in removing the vegetations after the method of Apostoli. This is accomplished by introducing an

electrode, insulated to or near the point into the uterine cavity, and connecting with the negative pole of the battery, connecting the other pole with a large pad of moistened potter's clay, sponge or prepared cotton, placed over the abdomen. The time for employment of the galvanism at each treatment should be from 10 to 15 minutes and the treatment should be repeated about twice a week.

The strength of the current employed will depend much upon the acuteness of the particular case, and the susceptibility of the patient to electrical treatment. The chronic cases always require the strongest current. The dosage may be fixed at from ten to three hundred milliamperes; the minimum is, in his judgment too small to accomplish any results, and yet physicians with much larger experience than himself have had to employ it.

This line of treatment he considers free from many of the objections to others, it is cleanly, free from pain, and exempt from danger. Unlike cauteries and escharotics it can be limited in its influence and produces no deleterious effects upon the sound tissues, nor does it leave a raw and exposed surface like the curette to absorb poisons and septic agencies, and while it removes the vegetations it imparts renewed tone and vitality to the diseased organ.

SECOND DAY—AFTERNOON SESSION.

Dr. A. J. Swaney, of Gallatin, contributed a paper entitled *RETAINED PLACENTA IN MISCARRIAGE; HOW SHALL WE TREAT SUCH CASES?* He said the dangers from retained placenta in miscarriage were hemorrhage and septicæmia. When the delivery of the placenta is prolonged ought we still to abstain—ought we to wait or ought we to interfere actively in order to forestall these dangers which almost certainly will result and further interfere at a time when it is far easier than later, when we may be forced to action? Those who favor active interference are Tyler, Smith, Murray, Simpson, Leishman, Munde, Grandin and many others. The reasons given for active interference are the frequency of these dangers in prolonged delivery of the placenta. Simpson directs that if the cervix is dilated or patent, to act at once; if it is not dilated he dilates it at once. The woman is then anæsthetized, the uterus depressed as much as possible by the external hand and with the index finger of the other hand he removes the

placenta and membrane. If he cannot sufficiently depress the uterus with the hand he does not hesitate to forcibly drag it down by a double tenaculum fixed in the cervix.

Munde and Grandin, of New York City, go still further and curette the cavity of the uterus with special instruments made for the loosening of adherent placenta and its removal from the uterus.

The authorities who counsel waiting for serious complications before interfering are just as many. We mention Ramsbotham, Davis, Burns, Fleetwood Churchill, Graily Hewit, and many others. Active intervention does not mean unnecessary interference. Nature is ever to be given a chance, but when we see that her efforts are futile, certainly it is but rational to assist her, and this should be done as directed by Munde, by placing the woman in the left lateral position and with a dull wire curette remove the placenta or any part of the secundines that may remain through a Sims speculum. This is far better and easier than the method advised by Simpson of dragging or pressing down the uterus and introducing the finger into the uterine cavity. The uterine cavity should then be washed out with hot water, slightly carbolized through a Janeson's uterine douche, and this should be repeated every six or eight hours until all fetor disappears from the lochial discharge.

Hemorrhage after miscarriage, even when we believe the placenta and secundines have been removed, invariably means retention of a part of the placenta or secundines. Profuse hemorrhage may occur for weeks from this cause, and in such cases we should boldly explore the uterine cavity and remove any offending matter that may be present. In the first twelve weeks of pregnancy the dangers from hemorrhage and septicæmia are not so great and the expectant plan is more justifiable. After the third month it is criminal negligence to wait and subject a woman to the dangers arising from retained placenta when she can be relieved by an operation which, if properly done, can do no harm, and spare her the risk of hemorrhage and septic poisoning, in short, the author believes the early removal of the secundines is easy and safe and forthwith guarantees the woman against the dangers of hemorrhage and sepsis.

Dr. J. L. Jones, of Bells, read a paper on INDIGO AS AN EM-

MENAGOGUE, which he said his attention was first directed to this drug as an emmenagogue in July, 1887, from an essay published in the Medical and Surgical Reporter, of Philadelphia, by Dr. S. L. Gount, of Lafayette, Ind. Acting on the suggestions offered by Dr. Gount he had used it in many and various cases.

His first case was a young lady, twenty years of age, who had not menstruated in five months. He had been treating her for three months with the usual remedies without any effect, so he made up his mind to give indigo a trial, which he did with the following result. He ordered indigo $\bar{3}$ ij, subnitrate of bismuth $\bar{3}$ ss., well mixed, She took one-half teaspoonful in one-third of a glass of water three times daily for nearly four weeks, when one day he was sent for in great haste to see his patient. On his arrival he found her on the bed, and comfortable. Having asked why he was so hastily called, he was told by the mother that her daughter while walking in the garden, without any pain or warning of any kind, began to flood. The gush was followed by a gentle flow which lasted only for a little while. In five days she was well, and has not suffered from amenorrhœa since.

Dr. Jones has since used indigo in thirteen cases with but one failure, and that lady proved to be pregnant.

During the administration of the drug the os uteri becomes soft and patulous, admitting the end of the index finger. There is often a serous discharge from the vagina. The urine becomes brownish-green in color, and its odor is offensive. The stools are watery and offensive.

THIRD DAY—MORNING SESSION.

Dr. J. A. Witherspoon, of Columbia, read a paper on DIABETES, confining his remarks principally to diabetes mellitus. He said the term diabetes mellitus is a symptomatic one, being a deviation from health in which the processes of nutrition are seriously deranged, and presenting a group of complex symptoms, the most conspicuous of which are, first, frequent micturition, passing large amounts of pale saccharine urine. Coincident with this is a most insatiable thirst and dryness of the mouth and fauces, which is by far the most annoying symptom, the freest drafts of water giving but little or no satisfaction. The skin becomes dry and harsh, with complete absence of perspiration, and followed

by a general pruritus, sometimes impossible to relieve. These were some of the many symptoms of the malady.

The etiology of the disease is not yet an unsolved problem. It is an affection of adult life, but few cases being reported in children, and those always fatal. The only recovery reported, so far as the speaker is aware, was a girl 12 years of age.

The treatment is conveniently divided into dietetic, medicinal and the hygienic. The dietetic is by far the most important. We must exclude from the bill of fare all food-stuffs containing starch or sugar, for two reasons: 1st, The normal action of the liver in its glycogenic functions is seriously deranged and incapable of oxidizing the maltose sent to it by the digestion of carbohydrates, and they are therefore useless aliments. 2nd, They seem to aggravate and increase the glycosuria. A strict meat and green vegetable diet agrees better than any other. Some give milk, others forbid it entirely. He had found in the few cases he had treated that it was impossible to continue for long periods any one diet. The pure skim-milk diet is meeting with much favor. Alcohol and all spirits, except small quantities of light wine or beer, must be forbidden. This regimen alone will lessen the quantity of sugar eliminated, but it is necessary to use in connection certain medical treatment. The drugs giving the best satisfaction are opium or its alkaloids, morphia or codeia, ergot, arsenic and many others. Of all the drugs mentioned, codeia has been by far the most satisfactory in his hands. It was first suggested by Dr. Pavy, of London, and has the great advantage over its sister alkaloid, morphia, in not producing sleep. It is more efficient, less dangerous and does not produce the troublesome constipation caused by morphia or opium. Next to it the speaker would place ergot for its physiological effect upon the blood-vessel walls. Recently sulphonal and antipyrine have been used with reported good results. He had never used antipyrine for the reason that it is recommended in from 30 to 60-grain doses. He did try sulphonal in 10-grain doses, three times a day, and in two days it produced so much giddiness and sleepiness that he had quit giving it. He had only used arsenic as an alterative tonic after the sugar had disappeared from the urine. With this treatment the patient should be advised to take light exercise, always short of fatigue, and their surroundings should be good and well

ventilated. Alkaline carbonated waters are often of great utility and gratefully received.

TREATMENT OF STRICTURES OF THE MALE URETHRA. This was the title of a paper read by Dr. J. W. Handly, of Nashville. He said strictures of large calibre, if they be recent, but poorly organized and of the linear variety, may be treated by dilatation, which must be continued for months. But should the stricture be densely fibrous, and not easily dilatable, the cutting operation becomes necessary, for which purpose he prefers Dr. Otis' improved dilating urethretome with which the surgeon can accurately divide any stricture to any size desired.

Strictures of small calibre, situated in advance of the bulbo-membranous junction, unless seen very early and found to be unusually soft and dilatable, furnish a typical condition for internal urethrotomy, that in which it is attended with the least possible danger and greatest prospect for a permanent cure. Should the contractions be so great that the Otis urethretome cannot be used, he had found Bank's whalebone dilators, which are made in four sizes, of great advantage in opening the canal so as to admit of the urethretome, and considered them very useful.

Strictures of small calibre posterior to the bulbo-membranous junction, require a very different course of treatment, since internal urethrotomy at this point is often attended with profuse hemorrhage, fever, rigors or other disturbances equally as disagreeable. Strictures of this variety permeable only to filiform bougies may be treated in one of the four following ways, to-wit:

I. After the filiform has been introduced it may be allowed to remain in situ for two or three days and another passed alongside of it to serve as a guide for the introduction of a tunnelled sound, the latter to be followed by the ordinary soft or steel bougies. This is good and safe surgery in the absence of retention.

II. The surgeon may attempt to conduct a tunnelled sound over it at once, to be followed by gradual dilatation.

III. He may conduct over it a grooved staff and then proceed to the performance of external urethrotomy; or,

IV. He may use the staff as a guide for the Maissonneuve urethretome and may immediately perform internal urethrotomy.

Dr. W. T. Briggs read a paper upon **WOUNDS OF THE INTRACRANIAL SINUSES.** He said the subject was one which had not

received from authors the attention its importance demanded, and that very little indeed had been written upon the subject. In many standard works upon surgery no reference whatever is made to it. He did not propose to shed additional light upon this neglected subject, but simply to give his impressions from the study of a number of cases of injuries of the sinuses which had fallen under his observation. The following is a summary of his paper.

The dural sinuses are so well protected by the *tutamina cerebri* that they are not often the subject of wounds. Occasionally an injury inflicted on the surface of the cranial walls without a lesion of the bones, or even of the scalp, may rupture a sinus and produce a fatal internal hemorrhage.

A blow or fall may fracture the skull at one point and lacerate a sinus situated at a greater or less distance from the point of a fracture. More often a sinus is wounded by a sharp-pointed fragment of bone in comminuted depressed fractures, or by the penetration of the skull by pointed or sharp-edged instruments, or by gun-shot wounds. Occasionally the sinuses are opened by the pointed teeth of the trephine.

The older writers upon surgery warned surgeons to avoid the situation of sinuses in the application of the trephine. Modern authors do not hesitate to advise the use of trephine directly over the sinuses if necessity demands. He had often removed sections of the skull an inch or more over sinuses with impunity with Galt's trephine, without injuring the vessels.

The result of such wounds depend on the character of the lesion. When a large opening is made in a sinus, the hemorrhage, if not promptly restrained, may prove rapidly fatal. When the opening is direct and not large the hemorrhage may be easily checked by appropriate means. When the blood does not escape through the external wound but accumulates in the skull, compression of the brain ensues.

The entrance of air into sinuses, though they are canulated by their anatomical construction, is not of frequent occurrence.

The hemorrhage arising from an open wound of a sinus may be easily controlled, and the opening permanently closed by prompt and appropriate treatment.

When the hemorrhage is concealed and symptoms of compres-

sion arise in consequence, the trephine should be used for the removal of bone over the wounded sinus, that it may be properly treated.

The means that may be used in the treatment of wounded sinuses are, 1st, The encircling ligature; 2nd, The lateral ligature; 3rd, Suture; 4th, Acupressure; 5th, Forcipressure; 6th, Direct compression.

1st. The ligature might be used with success in arresting bleeding from sinuses, but the usually small opening in the skull and the consequent difficulty of placing it is an objection. Besides other means more easily used are equally effective.

2nd. The lateral ligature has proven effective in the hands of some surgeons but, in my opinion, should not be resorted to because its action is uncertain. It is very liable to slip and give rise to secondary hemorrhage, besides it does not put the parts in the best condition for healing.

3rd. The edges of an opening in a wounded sinus may be closed and all bleeding stopped by suturing the edges of the wound with aseptic silk. When there is free space for work the suture is very effective, and may be practised with great confidence. In the application of the suture it is necessary that the intima should be brought in contact, which can be best accomplished by the continuous through and through stitch instead of the glover suture.

4th. The value of acupressure in controlling bleeding in these accidents is undoubted. The passage of a pin through the sides of the dural opening and the application of a thread thrown over the pin will effectually control the hemorrhage. The compressing pin does not irritate and need not be retained very long.

5th. Forcipressure is also a valuable measure in the treatment of hemorrhage from wounded sinuses. It is easy to grasp the mouth of a gaping sinus with hæmostatic forceps and leave it in situ until it produces permanent obliteration of the wound. It is complete and effective.

6th. The remedy to which I call attention last is by no means the least valuable means in our possession. Indeed, in my opinion, it is entirely sufficient to control any bleeding from wounded sinuses, and I have invariably depended on it in all the cases I have treated. I refer to direct compression. A small dossil of

aseptic gauze or cotton is to be placed directly over the wound in the sinus, a small compress is then to be placed over the pledget, the flap of skin is then to be drawn over these, a compress over the flap so as to be retained by a well-adjusted bandage. The bandage and the external compress may be removed in a few days, but the internal compress is not to be disturbed until it is loosened by the discharges from the wound, or better still, until it can be washed away by a gentle stream of water. I do not think a better device can be utilized for the purpose. It is scarcely necessary to say that the treatment of wounds of the sinuses after hemorrhage should be conducted upon strictly aseptic and antiseptic principles.

The author illustrated his paper by the report of a number of interesting cases which had occurred in his practice.

OFFICERS FOR 1892.

The following officers were elected for the ensuing year:

President—Dr. J. W. Penn, Humboldt.

Vice-President for Middle Tennessee—Dr. J. A. Witherspoon, Columbia.

Vice-President for East Tennessee—Dr. C. E. Ristine, Knoxville.

Vice-President for West Tennessee—Dr. C. H. Lovelace, Dukedom.

Secretary—Dr. D. E. Nelson, Chattanooga.

Treasurer—Dr. J. P. C. Walker, Dyersburg.

Place of meeting, Knoxville, second Tuesday in April, 1892.

Extracts from Home and Foreign Journals.

SURGERY.

PERFORATION OF THE VERMIFORM APPENDIX.

Among the several important discussions that have lately taken place at our societies, that on the removal of the vermiform appendix will probably rank as one of the most valuable. There was by no means unanimity, even among the surgeons, as to which cases were to be submitted to the operation and when was the best time to operate. Mr. Pearce Gould divided all the cases into three groups. In the first, which constituted the majority, there was a local suppurative peritonitis limited by adhesions and usually due to perforation of the appendix. In this class a small incision and drainage were needed, care being taken not to break down the adhesions and so set up a general peritonitis. He did not advise any attempt to remove the vermiform appendix, as he did not believe it ever did any harm when left, even if ulcerated. His second group comprised cases in which there were no adhesions and in which perforation was followed by general peritonitis. In these, early operation was urgently called for, with careful irrigation of the whole peritoneal sac; an incision must always be made over the vermiform appendix, whether a median one was also made or not. The third group consisted of the relapsing cases, with little tendency to suppuration. In these, prolonged rest often led to complete quiescence, and to defer the operation until local suppuration had intervened did not expose the patient to any great additional risk.—*London Letter to N. Y. Med. Jour.*

ON THE TREATMENT OF STRICTURE OF THE MALE URETHRA.

The author's conclusions as to the treatment of organic strictures of the urethra may be summed up as follows:

I. Strictures of large calibre, that is, of more than fifteen French, situated at or behind the bulbo-membranous urethra, are to be treated, almost without exception, by gradual dilatation.

II. Strictures of large calibre occupying the pendulous urethra are to be treated by gradual dilatation when very recent and soft, and by internal urethrotomy when of longer standing, distinctly fibrous in character or non-dilatable. It is to be remembered that the great majority of so-called strictures of large calibre of the pendulous urethra are merely points of physiological narrowing.

III. Strictures of the meatus and of the neighborhood of the fossa navicularis should be divided upon the floor of the urethra whenever it is evident that they are real pathological conditions producing definite symptoms, and are not normal points of narrowing.

IV. Strictures of small calibre (less than fifteen French) situated in advance of the bulbo-membranous junction, unless seen very early and found to be unusually soft and dilatable, furnish a typical condition for internal urethrotomy, which should be done preferably with a dilating urethretome and, invariably, with all possible antiseptic precautions.

V. Strictures of small calibre (less than fifteen French) situated at, or deeper than the bulbo-membranous junction, should be treated, whenever possible, by gradual dilatation. In a case of resilient, irritable, or traumatic stricture in this region, or of stricture which, for any reason (as the occurrence of rigors), is non-dilatable, external perineal urethrotomy is the operation of choice.

VI. Strictures of the deep urethra, permeable only to filiform bougies, should be treated by gradual dilation, when possible, the filiform being left in situ for some time, and followed by the introduction of others, or used as a guide for a tunnelled catheter. If the stricture be not suitable for dilatation, external perineal urethrotomy should be performed.

VII. Impassable strictures of the deep urethra always require the performance of perineal section.—*University Med. Magazine.*

ABDOMINAL SECTION FOR ACUTE INTESTINAL OBSTRUCTION.

Jordan Lloyd (*London Lancet*) after giving the details of eight cases comes to the following conclusions:

I. In acute intestinal obstruction our attention should be primarily directed to the strangulation of the walls of the bowel rather than to the stoppage of the faecal current. When strangulation exists immediate operation is demanded.

II. The ordinary text-book distinctions between obstruction in the large and small bowels are not always to be depended upon.

III. In all obstructions above the rectum calling for operation, median abdominal incision is the proper primary procedure.

IV. When the abdomen is open the examination of its contents should be systematic and expeditious, the hand being introduced into the peritoneal cavity, if necessary, and if the obstruction is not quickly discovered, the most distended coil should be fixed to the skin and opened at once. If the large intestine is the part involved, the cæcum or sigmoid should be brought through a special opening made in either groin.

V. With proper precaution a few feet of bowel may be withdrawn from the peritoneal cavity, and returned without difficulty and without serious risk.

VI. Rapidity of procedure with a minimum of disturbance are the essentials of operative procedure.

VII. The number of lives saved by abdominal section will increase, as earlier and more accurate diagnosis comes to be made.—*Boston Med. and Surg. Journal.*

A METHOD OF APPLYING PLASTER JACKETS WITHOUT THE
SAYRE SUSPENSION APPARATUS.

Dr. N. E. Forest (*Med. Record*) offers a new apparatus for use in applying the plaster jacket. It consists of a wooden frame two and one-half feet wide by six feet long. At the upper end of the frame is a crossbar by which the child can hold. To apply the dressing, a piece of unbleached muslin is stretched across the frame, which is placed in an inclined position, the head being elevated while the foot is on the floor.

The child is placed on the muslin, with the arms extended and grasping the head-bar. The traction can be made on the feet if

necessary. A triangular opening is made in the muslin on each side of the child, so that a strip is left supporting the back. The plaster bandage is then applied, being passed through the triangular openings, outside the strip of muslin, thus incorporating it between the shirt and plaster.—*Am. Jour. of Med. Sciences.*

ACETANILID FOR CHANCRE AND CHANCROID.

The *Journal de Medicine* states that Basilevitch reports in *Nouveaux Remedes*, that cicatrization took place in a short time as a result of sprinkling acetanilid on the surface of the ulcers in one case of chancre in a woman and in two cases of chancroid in men.

In these cases acetanilid has the advantage over iodoform of being inodorous, and that large doses do not give rise to toxic manifestations. It is also less expensive than iodoform—an important consideration, especially in dispensary practice.—*Amer. Pract. and News.*

MEDICAL.

THE MECHANICAL TREATMENT OF GASTRIC AND INTESTINAL DISEASES.

Dr. Josef Sumegi (*Oest-Ungar Centralbl. f. d. Medic Wissench.*) states that in chronic constipation our main reliance in treatment should be massage of the relaxed portions of intestine. In addition to this he recommends gymnastic exercise, movements of flexion and extension at the knee, rotary movements of the trunk, and tapotement or light beating over the pelvic region. The treatment by this method is kept up for two or three months, and if necessary is repeated. Attention should also be paid to the diet. Massage is best performed in the morning, half an hour to an hour after breakfast, or four or five hours after dinner.—*Weekly Medical Review.*

THE WEIGHT OF THE BODY DURING TYPHOID FEVER.

Dr. Zjenetz, in the *Wiener Medicinische Wochenschrift*, publishes the results of a careful study of the weight of the body during the course of three hundred and eighty-four cases

of typhoid fever. The loss of weight keeps on while the fever exists, occasionally continuing during convalescence and but rarely ceasing until there is no longer any pyrexia. The loss is most decided in the beginning of the disease, and it gradually diminishes subsequently. The increase of weight that occurs during the first week of convalescence is quite marked, becoming less in the subsequent weeks. The variations from the usual increase or decrease seem to be due to diarrhœa, sweating, intestinal hemorrhage, or such complications as pleurisy or pneumonia. If any of these are well marked, the loss of weight will continue during convalescence. There always seemed to be a direct relation between the loss of weight on the one hand and the intensity of the disease on the other.—*N. Y. Med. Jour.*

MERCURIAL STOMATITIS.

Fournier (*La Médecine Moderne*) discusses the causes and prophylaxis of the stomatitis resulting from the therapeutic administration of mercury. In giving mercury by the mouth, by inunction, by fumigation, or by subcutaneous injection, there is always risk of producing stomatitis. All preparations of mercury, however, are not equally active in this direction. The protiodide deserves the popularity in which it is held. From one-third to three-quarters of a grain daily is ordinarily well borne. Larger doses are apt to produce ptialism and stomatitis. The bichloride in doses of one-seventh (!) of a grain, once, twice, or three times a day, is well tolerated. It does not salivate because it must be given in small doses so as not to be rejected by the stomach.

Inunctions are most likely to give rise to stomatitis. A drachm of mercurial ointment, well rubbed into the skin, occasions no unpleasant results. When stomatitis follows inunctions, its onset is sudden and its intensity marked.

In administering mercury by subcutaneous injection, stomatitis may be avoided by using minimal doses at intervals of two or three days.

Certain conditions favor the development of mercurial stomatitis. There may be an idiosyncrasy against mercury in any form, the smallest dose, however administered, causing ptialism, or the appearance of a red rash. Pre-existing stomatitis, from whatever cause invites an intensification from the use of mercury.

The mere presence of the teeth seems to be sufficient to induce such a condition, as mercurial stomatitis is not seen in edentulous infants and old persons, or in those employed in mercurial mines who have already lost their teeth.

Females are more susceptible than males to the ptyalizing effects of mercury. Salivation also occurs with greater readiness when inunction is practised upon a delicate surface, as the skin of the scrotum, or where an abrasion exists or the epidermis has been removed.—*Am. Jour. of Med. Sciences.*

HYPERTROPHY OF THE PANCREAS.

Prof Fenerisch, of Clausenburg, recently found, on making a *post-mortem* of a middle-aged man, that a tumor which could be felt through the abdominal walls was the greatly enlarged head of the pancreas which embraced the duodenum. The latter was much contracted, so that it was only large enough to admit the thumb. The upper portion of duodenum, however, was enlarged to about the size of the colon; the stomach was also dilated and the muscular coats of both stomach and duodenum were hypertrophied; the annular portion of the pancreas was found to be supplied by special arterial and venous twigs, and it was furnished with a special branch from the ductus communis choledochus. This combination of a ring-like pancreas surrounding a contracted duodenum has been occasionally noticed before in cases described by Symington, Ecker, and Aubery, and an approach to the same condition has by no means unfrequently been observed where there has been an abnormally developed pancreas partially surrounding the duodenum, which even then is frequently found to be contracted. In both classes of cases there seems to be a tendency for the stomach and upper part of the duodenum to become dilated. This dilatation may be produced, when there is no contraction of the duodenum, by a "kink" being formed in the gut, owing to the fixation of the duodenum, the result being that the stomach and duodenum become distended with food, and permanent dilatation and hypertrophy are induced. This is interesting from a clinical point of view. Further, Prof. Fenerisch remarks that in cases of abdominal tumor it is well to remember that a hypertrophied head of the pancreas might convey much the same impression by the touch as a carcinomatous pylorus.—*Lon. Lancet.*

THE ANTISEPTIC PROPERTIES OF BLOOD SERUM.

In a paper read before the Societe de Biologie, of Paris, Dr. Roger (*Allgem Med. Cen. Zeitung*) reported some experiments which tend to show that blood serum has the property of greatly diminishing the virulence of microbes. As is well known, complete immunity against erysipelas may be conferred on animals by inoculating them with fairly virulent cultures of the erysipelas-cocci. One month after an inoculation Rogers collected the blood of the animal experimented upon, as well as the blood of a healthy animal, and made cultivations of erysipelas-cocci upon the serum of both for purposes of comparison. He found by microscopical examination that the cultures developed to the same extent, and in the same manner in the blood-serum of both animals, with the single exception that in the serum of the inoculated animal the chains of cocci were somewhat longer than in the other. Rabbits were then inoculated with streptococci which had been cultivated upon the normal serum, and if the cultures were sufficiently virulent, death always took place from general infection. On the other hand, this result was never observed when the cultures used were taken from the serum of the inoculated animal. If less virulent cultures were employed, the cocci derived from the healthy serum usually gave rise to a moderate grade of erysipelatous infection, while those from the serum of the inoculated animals produced only small abscesses.—*International Jour. of Surgery.*

OBSTETRICS.

TRISMUS NEONATORUM TREATED WITH SULFONAL.

Dr. Julius Berenyi reports the case of a child, eight days old, who developed tetanus on the fifth day after birth. On examination he found the internal organs normal, the pulse was 148, the respirations 50 and quiet. The paroxysms were initiated by crying fits and great restlessness. The skin assumed a bluish color, and around the root of the nose the integument was thrown into thick folds. The nostrils became distended, the buccinators were

rigid, the mouth was slightly opened, but would not admit the tip of the little finger. The abdominal wall was hard and tense, the upper extremities crossed in a fixed position over the chest; the thumbs were spasmodically flexed inward, the vertebral column was perfectly rigid. From 9 o'clock in the morning to 2 o'clock in the afternoon the little patient had five attacks, of which the fourth lasted an hour. Berenyi administered twenty centigrams of sulfonal in an euema, and also gave the drug by the mouth. After the fifth attack, which was less intense than the others, the child began to take the breast. On the same day three attacks of diminished severity occurred. On the following day the paroxysms became less frequent and intense, and on the sixth day of treatment had disappeared completely. Altogether ten grams of sulfonal had been employed, without the occurrence of somnolence or disagreeable after-effects.—*Pester Mediz-Chirurg Presse.*

TRANSPLANTATION AND GROWTH OF MAMMALIAN OVA WITHIN
A UTERINE FOSTER-MOTHER.

In the Proceedings of the Royal Society, (*New York Medical Journal*), there is a very interesting account of some experiments made by Mr. Walter Heape, showing that it is possible to make use of the uterus of one variety of rabbit as a medium for the growth and complete foetal development of fertilized ova of another variety of rabbit. Two ova, just undergoing segmentation, were obtained from an Angora doe rabbit that had been fertilized by an Angora buck thirty-two hours previously. These were immediately transferred into the upper end of the Fallopian tube of a Belgian hare doe that had been fertilized three hours before by a buck of that breed. She was a seven-month-old-virgin doe, and in due course of time after the covering gave birth to six young; four of these resembled herself and mate, while two showed undoubted Angora characteristics in the long, silky hair peculiar to that breed, in being albinos, and in a habit, also peculiar to Angoras, of slowly swaying their head from side to side as they look at a person. All the young at birth had some skin disease that disappeared under treatment, and one of the Angora young was scantily supplied with hair. Both the Angora young were bigger and stronger when born than the others, three of the Belgian hare young dying when they were some three months old.

Each variety seemed to be *sui generis*. These experiments were undertaken to determine whether a uterine foster-mother would have any influence upon the foster-children, and whether the presence and development of foreign ova in the uterus of a mother would affect the contemporary offspring of that mother.—*Boston Med. and Surg. Journal*.

CHLOROSIS AND ITS TREATMENT.

Dr. Frederick Scholz, of Bremen, has published a remarkable work on chlorosis, the out-come of observations made during the last twenty years. Instead of regarding the deficiency of iron or hemoglobin, or even that of the red corpuscles as the primary affection, he states that contraction of the vessels is always present in these cases, as indeed was observed by Bamberger, Rokitansky and Virchow; and this he contends is not to be regarded as a complication due to an altered condition of the blood, but as the primary condition which is followed by the morbid change in the blood. As a matter of fact, the vessels are, he says, too full or in the condition termed by the older physicians “plethora ad vasa,” the blood being—or becoming—abnormally serous. Long ago his attention was struck by the cold and livid condition of the skin in anemic subjects, and he was led by this to employ hot baths, together with gentle friction, in the treatment, with the view of acting directly upon the skin, so as to improve the vitality and nutrition generally. The success of his first attempts was so marked that he was encouraged to persevere in this line of treatment, and he has since had many opportunities of extending his experience with it. Hot baths diminish the plethora by relaxing the tension of the vascular system, which is high, quickening the circulation, and thus relieving the palpitation, dyspnoea, and other symptoms. In thirty cases where the distress of the patient was very great, Dr. Scholz has gone a step further and supplemented the hot bath by venesection. Paradoxical as this treatment may appear it was followed by marked benefit, and, if the theory of the pathology of chlorosis above mentioned be correct, there can be little doubt that the novel line of treatment practiced by Dr. Scholz is justifiable.—*Columbus Med. Journal*.

THE CAUSE OF THE VOMITING OF PREGNANCY

Has been studied by Dr. Weisel, a German, who concludes that

a loaded condition of the bowels is a necessary factor in its production, and claims to have relieved it by persistent use of large enemata of milk, containing two and a half drachms of table salt to the quart. He found that the relief was just in proportion to the thoroughness with which the bowels were evacuated, and that after a time when the bowels were brought into such a condition as to move freely of themselves, the vomiting was permanently cured. The editor of the *Archives of Gynecology*, commenting on these statements says that in a number of cases he has been able to relieve patients completely by a properly fitting abdominal supporter. The fact is that there is no specific treatment for this condition and it is futile to hope to find one. The cause is undoubtedly not always the same and is often complex, the general experience of medical men going to show that while many cases can be much benefitted by treatment there are some that nothing will help.—*Northwestern Lancet*.

IPPECACUANHA TO INCREASE LABOR PAINS.

Drapes (*Les Nouv. Remed.*) affirms that ipecac, in the form of wine of ipecac, in the dose of ten to fifteen drops, repeated every ten minutes, constitutes a powerful remedy to provoke strong contractions of the uterus in a case of uterine inertia or rigidity of the cervix, which threatens to indefinitely prolong the labor. After the second or third dose strong uterine contractions will come on, will repeat themselves at regular intervals, and tend to rapidly bring the labor to an end. That which makes ipecac in this condition superior to ergot of rye is that it never provokes tetanic contraction of the uterus, so frequent after the administration of ergot.—*Med. News*.

CAFFEIN IN PUERPERAL HEMORRHAGE.

Misrachi (*Centralblatt fur Gynecologie*) recommends the hypodermic injection of caffein in puerperal hemorrhage. He says that it produces quicker results than ergot, and it is at the same time a powerful stimulant. He begins with a dose of twenty centigrams, which is repeated until a desirable reaction is established. The insolubility of caffein may be met by mixing it with benzoate of sodium, the two substances readily dissolving in hot water.—*The Journal of A. M. A.*

INSTANT DEATH FROM AIR IN THE UTERINE VEINS IN THE
FOURTH MONTH OF PREGNANCY.

Hektoen, pathologist to the Cook County Hospital (*North Am. Practitioner*) reports an interesting case of death occurring after a vaginal douche, the patient being in the fourth month of pregnancy. The post-mortem examination revealed air in the sub-peritoneal vessels, in the coronary vessels, and in the right ventricle and auricle. Intra-uterine pregnancy of four months existed, the patient being otherwise healthy. There was no air in the veins of the broad ligaments, in the vena cava, or pulmonary arteries. The membranes had disappeared, and at the lower margin of the placenta, which was two and a half inches in diameter, a separation from the wall of the uterus had taken place three-quarters of an inch long. Beneath this separation the openings of the uterine sinuses could be readily distinguished. The air probably entered the circulation in considerable quantity at one time; the douche was taken with a Davidson syringe which leaked. It is supposed that intermittent uterine contractions followed the injections, causing partial separation of the placenta, and that when relaxation occurred air entered the placenta sinuses.—*Am. Jour. of the Med. Sciences.*

Editorials, Reviews, Etc.

PUBLISHER'S NOTICE.—The JOURNAL is published in monthly numbers of *Forty-eight pages*, at one dollar a year, to be always paid in advance.

All bills for advertisements to be paid quarterly, after the first insertion of the quarter.

Business communications, remittances by mail, either by money-order, draft, or registered letter, should be sent to the Editor, C. S. BRIGGS, M. D., Cor. Summer and Union Streets, Nashville, Tenn.

All communications for the JOURNAL, books for review, exchanges, etc., should be addressed to the Editor.

TENNESSEE STATE MEDICAL SOCIETY.

The annual meeting of this venerable body was held in this city April 14th, 15th and 16th, and was in all respects a pronounced success. The attendance was larger than the previous year, over one hundred and sixty names having been registered. The machinery of the Society moved with the utmost smoothness, barring a little unpleasantness between the Secretary and the Treasurer, which, however, after occasioning a slight jar, was quickly and satisfactorily repaired.

An event of the meeting which passed off with unusually brilliant *eclat* was the night public session, held on the evening of April 14th, in the lecture room of Watkin's Hall. Quite a large and fashionable audience of ladies and gentlemen were present. The Hall was handsomely decorated for the occasion; the stage festooned with smilax, and rendered otherwise attractive by flowers and plants. The initials, in large letters, T. S. M. S., in white and red flowers were especially admired.

The addresses of the evening were unusually appropriate to the

occasion, those of the Mayor of the city, Hon. Wm. A. Litterer, and the representative of the Governor, Adj. General Norman, were short and *a propos*. The address of Judge J. M. Dickinson was, as are all such efforts of this distinguished jurist, eloquent, scholarly and witty.

The address of the President, Dr. Geo. A. Baxter, of Chattanooga, devoted to needed reforms in the profession, met with hearty applause from his hearers, its sentiments being in entire accord with the professional part of his audience.

Too much praise cannot be bestowed upon the indefatigable manager of the concert, Mrs. A. H. Stewart, who, in the short time provided her, arranged a concert that would do credit to any city. The various songs and instrumental solos were in every instance most admirable. We feel sure that we voice the sentiment of every individual present, when we say that the concert was a most *recherche* and enjoyable affair.

The papers presented at this meeting were all excellent, and the discussions general. There can be no doubt but that the character of the papers improves from year to year.

The election of Dr. J. W. Penn, of Humboldt, as President, gave universal satisfaction. No man in the profession of the State ever more richly deserved the honor. The re-election of Drs. Nelson and Walker as Secretary and Treasurer, respectively, was a deserved recognition of the faithful work done by these gentlemen during their previous terms. The next place of meeting is Knoxville, Tenn.

The attention of our readers is called to the short-hand report of the papers read, furnished the JOURNAL by Dr. Wm. Whitford of Chicago.

The circulation of the JOURNAL continues to increase. Every day the list receives a number of new names, and by the end of the year we hope to be able to claim the largest circulation

of any journal south of the Ohio river. Let every one of our present subscribers exert himself to get new subscribers for us, and such an end will be surely reached. Certainly all will agree that the subscription price is ridiculously small, and in reach of every one. Extra numbers of this edition will be sent to a good many who are not regular readers of the JOURNAL. We hope the JOURNAL will make a favorable impression upon these gentlemen and that every one who receives it may take the pains to send in his name as a subscriber.

DISTINGUISHED CONTRIBUTORS.

We are glad to be able to announce that the following gentlemen have signified their intention to contribute articles to the JOURNAL during the next few months. Mr. Lawson Tait, of Birmingham, England; Dr. John A. Wyeth, of New York City; Dr. N. Senn, of Chicago, Ill.; Dr. J. W. Penn, and others of Tennessee.

We hope to be able to add other names to this distinguished list in the near future. We would respectfully urge upon all our readers the importance of sending an occasional article. It is not always the papers from leaders in the profession that contain the most practical information. We would be pleased to have every subscriber of the JOURNAL become a regular contributor as well.

DEATH OF PROF. CHAS. T. PARKES.

The death of Prof. Charles T. Parkes, of Chicago, Professor of Surgery in the Rush Medical College, is announced. One of the most eloquent tributes we have ever read was that written by Dr. Senn, his distinguished successor to the chair of surgery in Rush Medical College.

THE AMERICAN MEDICAL ASSOCIATION.

The next meeting of this body will be held in Washington, commencing May 5th. The Nashville delegation to the meeting will consist of Drs. W. T. Briggs, Plunkett, Buist, Savage, J. Berrien Lindsley and others. The last named gentleman will represent the JOURNAL at the meeting of the American Medical Editors Association. We hope to be able to present the President's address in the next number of the JOURNAL.

CONGRESS OF AM. PHYSICIANS AND SURGEONS.

The meetings of the Congress of American Physicians and Surgeons will be held in Washington from 3 to 6 p. m., September 22nd, 23rd, 24th and 25th, 1891.

WILLIAM PEPPER,
Chairman of the Executive Committee.

We acknowledge with pleasure the receipt of the initial number of the *Ophthalmic Record*, a 32 page journal, published in this city, and edited by Drs. G. C. Savage and George H. Price. While intended to cater to the tastes of specialists, it will prove of service and interest to all practitioners of medicine. The first number is a model in every respect, being tasteful in design, typographically perfect, and its contents interesting. We extend the hand of journalistic friendship to the enterprising editors, and bespeak for them the warm and earnest support of the profession.

The resignation of Prof. Da Costa, of Jefferson Medical College is announced. The announcement will be received with serious regret, as no American teacher of medicine has earned such a reputation as a teacher of medicine.

One of the best mineral waters shipped to this section of the country is the Poland Water, the advertisement of which appears in the JOURNAL. It possesses a virtue not usually belonging to such waters, that it loses none of its efficacy by transportation. As a diuretic it has no superior. We use it in diseases of the kidney, functional and organic, and are always pleased with its effects. It is excellent in febrile diseases in children. Walsh & Hayes are the agents for Tennessee.

J. B. Lippincott Company will, beginning with April, issue quarterly thereafter a work entitled "International Clinics." This work will comprise the best and most practical clinical lectures on medicine, surgery, gynæcology, pediatrics, dermatology, laryngology, ophthalmology, and etiology, delivered in the leading medical colleges of this country, Great Britain and Canada. These lectures have been reported by competent medical stenographers and thoroughly revised by the professors and lecturers themselves. The object of the work is to furnish the busy practitioner and medical student with the best and most practical clinical instruction, in concise form. Each volume will consist of over 350 octavo pages, illustrated with photographic reproductions of important cases.

There is a firm in the East which professes to deal in a "Genuine" Hoff's Malt Extract, that has addressed us several communications offering the munificent price of five and ten dollars to publish articles laudatory of their so-called "genuine" product. We are sorry to see that many Eastern journals have accepted the articles in question, presumably at the same price. We are not so much in need of copy that we are obliged to sell our convictions for a paltry five or ten dollars, and besides, we know of only one "Genuine Hoff's Malt extract," and that is imported direct from Germany by the well-known firm of Tarrant & Co., of New York, and we would advise our readers, when ordering Hoff's Malt Extract, to distinctly state "Tarrants," else they are liable to get an inferior article.—*California Homœopath.*

AN IMPORTANT ANNOUNCEMENT.

P. Blakiston, Son & Co., the Medical Publishers of Philadelphia, announce for early publication, "A HANDBOOK OF LOCAL THERAPEUTICS," being a practical description of all those agents used in the local treatment of disease, such as Ointments, Plasters, Powders, Lotions, Inhalations, Suppositories, Bougies, Tampons, etc., and the proper methods of preparing and applying them.

The diseases which chiefly require local treatment are those of the Respiratory Passages, Ear, Eye, Skin, together with certain general Surgical affections, including the Diseases of Women. In order, therefore, that the various uses of each remedy may be thoroughly set forth the following gentlemen have assumed the authorship:

HARRISON ALLEN, M.D., Emeritus Professor of Physiology in the University of Pennsylvania; Laryngologist to the Rush Hospital for Consumption; late Surgeon to the Philadelphia and St. Joseph's Hospitals. GEORGE C. HARLAN, M.D., late Professor of Diseases of the Eye, in the Philadelphia Polyclinic and College for Graduates in Medicine; Surgeon to the Wills Eye Hospital, and Eye and Ear Department of the Pennsylvania Hospital. CHARLES B. PENROSE, M.D., Surgeon to the German Hospital; Instructor in Clinical Surgery, University of Pennsylvania, and ARTHUR VAN HARLINGEN, M.D., Professor of Diseases of the Skin in the Philadelphia Polyclinic and College for Graduates in Medicine; late Clinical Lecturer on Dermatology in Jefferson Medical College; Dermatologist to the Howard Hospital.

Each remedy will be taken up in alphabetical order and after a succinct description of their pharmaceutical properties, by Dr. GEORGE I. McKELWAY, will be considered with reference to the local treatment of the affections above outlined. The authors believe that the information contained in this work will not be found elsewhere. The activity in the various lines of special medicine is one of the most striking phases of the times, and has materially changed many of the older methods of treating disease by local means. The greater part of the literature which has appeared is not accessible to most physicians. The HANDBOOK, it is believed, will be of value to general practitioners as

well as to those who, like themselves, are especially interested in sub-divisions of the clinical field.

The work will form a compact volume of 400 pages, arranged in a manner to facilitate reference and containing besides the usual index of diseases, a complete index of diseases, that will greatly enhance its usefulness.

BOOK NOTICES.

MATERIA MEDICA AND THERAPEUTICS with Special Reference to the Clinical Application of Drugs. By JOHN V. SHOEMAKER; A.M., M.D., Prof. of Materia Medica, Pharmacology, Therapeutics and Clinical Medicine, Clinical Prof. of Diseases of the Skin in the Medico-Chirurgical College of Philadelphia; Physician to the Medico-Chirurgical Hospital; Member of the Am. Medical Association, of the Pennsylvania and Minnesota State Medical Societies, the American Academy of Medicine, the British Medical Association; Fellow of the Medical Society of London, etc., etc. Vol. II of a Treatise on Materia Medica, Pharmacology, and Therapeutics. Being an Independent Volume Upon Drugs. Philadelphia and London: F. A. Davis, Publisher, 1891.

Those of our readers who were so fortunate as to secure the first volume of this work will gladly welcome the appearance of the second, after an interval of time between the publication of the two, for which the author gracefully apologizes. The two volumes make a complete treatise upon the important subject which represents the most advanced and thoroughly elaborated state of those branches of medicine. The accomplished author is to be congratulated upon the thoroughness with which he has completed his great task, and upon the attractiveness he has succeeded in imparting to a subject almost of necessity uninteresting and dry. The classification of the subjects has been especially well done. All the results of the latest researches in the domain of therapeutics have been placed before the reader. "A succinct account of the latest contribution of experimental medicine to therapy—tuberculin or Koch's lymph"—has been incorporated in this volume. Dr. Shoemaker's reputation as a teacher and author is full guarantee of the excellent worth of the volume. We bespeak for the work the support of the profession and assure all that it is a publication which merits the fullest confidence.

SEXUAL NEURASTHENIA [Nervous Exhaustion]. Its Hygiene, Causes, Symptoms and Treatment, with a Chapter on Diet for the Nervous. By GEORGE M. BEARD, A.M., M.D., formerly Lecturer on Nervous Diseases in the University of the City of New York; Fellow of the New York Academy of Medicine; Member of the New York and Kings Counties Medical Societies; of the American Medical Association; of the Am. Neurological Association: Author of "Our Home Physician," "Hay Fever," "Stimulants and Narcotics," "Eating and Drinking," one of the Authors of "Medical and Surgical Electricity," etc. [Posthumous Manuscript]. Edited by A. D. ROCKWELL, A.M., M.D., Professor of Electro-Therapeutics in the New York Post Graduate Medical School and Hospital, Fellow of the New York Academy of Medicine, Member of the New York Neurological Society, one of the Authors of "Medical and Surgical Electricity," etc. Third Edition, with Formulas. New York: E. B. Treat, 5 Cooper Union. 1891. Price, \$2.75.

This is an exceedingly popular treatise with the profession. It is presented in its Third Edition thoroughly revised and improved, with important additions. The book is ably edited by Dr. A. D. Rockwell.

No. 10 in the Physicians' and Students' Ready Reference Series. **FEVER:** Its Pathology and Treatment by Antipyretics. Being an Essay which was awarded the Boylston Prize of Harvard University, July, 1890. By HOBART ARMORY HARE, M.D., B.Sc., Clinical Professor of Diseases of Children and Demonstrator of Therapeutics in the University of Pennsylvania; Physician to St. Agnes' Hospital and to the Children's Dispensary of the Children's Hospital; Laureate of the Royal Academy of Medicine in Belgium and the Medical Society of London, etc. Philadelphia and London: F. A. Davis, Publisher, 1891.

The fact that this is an Essay which was awarded the Boylston prize of Harvard University attests the high scientific character of the book. Dr. Hare has been a busy and much appreciated writer and this excellent essay will do much toward increasing his already distinguished reputation. We regard it as the most valuable recent contribution upon this important subject.

COSMETICS A Treatise for Physicians and Pharmacists. By HEINRICH PASCHKIS, Docent at the University of Vienna. New York: WILLIAM WOOD AND COMPANY, 56 and 58 Lafayette Place, 1891.

Believing that the physician is wrong in overlooking the study of the science of cosmetics, and that, when possessing a knowledge of their preparation and use, he can not only be of service to patients who suffer slight blemishes, but can also guard them

against dangerous experiments, Dr. Paschkis has produced a most remarkable book; not only are his recommendations the result of personal experiment, but as all the investigations, regarding the preparation of the various remedies, were carried on under his supervision, the result is as authentic as possible. Over 295 formulæ for the preparation of all kinds of cosmetics are included in the work.

No. 9 in the Physicians' and Students' Ready Reference Series. **MEDICAL SYMBOLISM** in Connection with Historical Studies in the Arts of Healing and Hygiene. Illustrated. By THOMAS S. SOZINSKEY, M.D., PH.D., Author of "The Culture of Beauty," "The Care and Culture of Children," etc. Philadelphia and London: F. A. DAVIS, Publisher. 1891.

This is a most valuable little book to physicians and others interested in the mythological aspect of early medicine. The historical features of the volume are of great value, as it gives us a glance at the progress of the science of healing from its earliest beginnings. Medical symbolism is something of which very little is commonly known. This little book puts the subject before the reader in a very attractive form. As an archæological contribution to medical literature it is exceptionally valuable. We have read the work with the greatest pleasure, and urge every one interested in such matters to procure a copy.

THE MODERN ANTIPYRETICS: Their Action in Health and Disease. By ISAAC OTT, M.D., Ex-Fellow in Biology, Johns Hopkins University; Ex-President of American Neurological Association; Consulting Physician to the Easton Hospital; Corresponding Member of the German Medical Society of New York, etc. E. D. VOGEL, Bookseller, Easton, Pa. 1891.

This is a carefully prepared, scientific exposition of a subject of which little is known by the general practitioner except as the result of routine practice. It is an invaluable contribution and should be in the hands of every physician. It is divided as follows: Fever, Chemistry, Physiological and Pathological Action, Therapeutics, Value of Antithermics in Typhoid Fever.

We find a full exposition of the value of drugs which have posed before the profession for years as antipyretics, as well as of the constantly accumulating class of drugs which are now being tested everywhere. Such works as this are peculiarly useful as

they serve to put before the profession, in a clear light, the scientific value of drugs which have claimed for them by their originators superior advantages over the older and long-tried members of this class of remedies.

WM. R. WARNER'S "THERAPEUTIC HANDY REFERENCE BOOK for Physicians. Philadelphia, Pa.: WILLIAM R. WARNER & Co. 1890. Third Edition.

[This is a convenient pocket reference book for all who are in the habit of using Warner & Co's excellent preparations. It contains a great deal of useful information of a general kind valuable to the practitioner.

ELECTRICITY: Its Application in Medicine and Surgery. A Brief and Practical Exposition of Modern Scientific Electro-Therapeutics. By WELLINGTON ADAMS, M.D., Author of "Art of Telephony—By Whom Discovered;" "Evolution of the Electric Railway;" "Design and Construction of Dynamo-Electric and Electro-Dynamic Machinery;" Lecturer on Electro-Therapeutics, University Medical College, Kansas City; Formerly Professor of Diseases of the Ear, Nose, and Throat Medical Department, University of Denver, and Editor "Rocky Mountain Medical Review." Volume I. 1891. GEORGE S. DAVIS, Detroit, Mich.

This is an excellent guide for all interested in the application of electricity as a therapeutic agent. While all are ready to accord a therapeutic value to this powerful agent, few comparatively possess the knowledge requisite for its correct application. These two volumes are thorough reference books, and are prepared with a view to simplifying the study as much as possible.

TAKING COLD. By FRANCKE H. BOSWORTH, M.D., Professor of Diseases of the Throat in the Bellevue Hospital Medical College of New York. 1891. GEORGE S. DAVIS, Detroit, Mich.

The publisher of the series of monographs of which this is one deserves the thanks of every physician, for furnishing such valuable medical literature at such cheap rates. This is an especially valuable number of the series. It treats of one of the commonest of every day accidents—"taking cold." The subject is handled by the author in a most masterly manner. It will do every physician good to read the work.

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C. S. BRIGGS, M.D., EDITOR.

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THE PRESIDENT'S ADDRESS.

Delivered at the Forty-second Annual Meeting of the American Medical Association, at Washington, D. C., May 5, 1891,

BY WM. T. BRIGGS, M.D., OF NASHVILLE, TENN.,

President of the Association.

LADIES AND GENTLEMEN: My heart swells with pride when I look over this vast assembly of the representatives of a profession distinguished alike for its antiquity, its scientific attainments and its usefulness; a profession which forms the true link between science and philanthropy.

You, gentlemen, as members of this Association, have been delegated by your local Associations, from every part of this Grand Republic, from the Kennebec to the Rio Grande, from orange groves and golden sands, from mountains clad in eternal

snows and valleys smiling in perpetual verdure, to represent them on this occasion.

You are here with no selfish motives, nor purposes of self-aggrandizement, nor to excite or perpetuate sectional antipathies.

Indeed, as physicians you should recognize no section; with you there should be no East, no West, no North, no South. You are here solely for the promotion of science and for the good of the human race. You are here to maintain the honor and dignity of the profession, and to hold aloft the flag of honorable medicine. You are here to lay your contributions—the accumulations of your study and observation—upon a common altar for the common good; to worship at the sacred shrine of medicine, and to renew your fealty to the noble profession to which you have devoted your lives and linked your fortunes. You are here to exchange experiences with each other, to separate by discussion the grains of truth from the wordy chaff in which they may be hidden, to renew friendships and to weave more closely the bonds of professional brotherhood.

As physicians you have an almost superhuman mission to fill. Life, the greatest of human blessings, and health, the greatest stimulant to earthly enjoyment, are the issues with which you are called to deal.

The chief objects of your professional work are to preserve the one, and to procure the other. The goal of your ambition and desire is almost at the end of human capacity. It is your province as well as your earnest desire to know all the secrets of organization. You would have the formative crystal and germinal spot made transparent. You would enter the microscopic world and witness the wonders therein revealed. Indeed, you would, if it were possible, search into and unravel the very mysteries of the vital principle.

To this perfect knowledge you aspire.

It is doubtful if man's intellect, great as it is, can ever compass all that he so earnestly desires, yet by constant and faithful work he may approach nearer and nearer to its consummation.

He has before him rich and boundless fields for research, from which the eager and enthusiastic explorer may gather the richest prizes. To these fields the future generation of physicians will be attracted in the hope and belief that as man advances in know-

ledge and approaches nearer to the understanding of the perfect wisdom, which designed his physical organization and by which he is brought into relation with the world around him, he will be enabled to solve more and more of the difficult problems which have for ages baffled and perplexed him, and to elevate the profession of medicine to a position more nearly akin to that accorded to the exact sciences.

We live in an age of progress, and all the arts and sciences are advancing with gigantic strides. With the aid of steam and electricity time and space have been almost obliterated. The most distant parts of the world have been made neighbors. A fact developed or an important discovery made, is flashed in the shortest conceivable time to the most remote parts of the globe, and given to the public without money and without price.

The science of medicine has kept pace with, if it has not outstripped all other sciences.

It has been completely revolutionized within our day. The microscope, chemical analysis, clinical observation and vivisection are carrying the medical mind with wonderful velocity in pursuit of knowledge, far beyond, indeed, the most sanguine conception of even a third of a century ago.

In every part of the habitable world blessed with the light of civilization, active busy members of our profession, endowed with high culture and incited by the noblest resolves, are enthusiastically engaged in unravelling the mysteries of disease and seeking the means and methods of treatment for the mitigation and relief of suffering, and prolongation of life.

That the full benefit of the labors of American physicians might be attained and utilized, it was essential that the members of the profession, scattered over an area of country of almost inconceivable extent, should be brought into associated action—should be organized into a body by whose annual discussions an exciting, vivifying and healthful influence might be exerted over the length and breadth of the land, until a correct and noble sentiment had been engendered in the bosom of every member of the profession.

Through the brilliant genius and indomitable energy of one who is known as the “Father of the Association,” this grand body was formed and has ever been sustained and fostered by his

parental solicitude, in which he has been nobly assisted by the cordial coöperation of his brethren. More than a generation has passed since its organization, and many of the master spirits which were present and assisted in the inauguration of the enterprise have joined the silent majority, leaving it as a precious heritage to their successors, who should be actuated by the same spirit which inspired those who had preceded them, and with the same energy and zeal endeavor to manage the high trust with an eye single to the honor and glory of the profession.

A few of those who assisted in its organization in 1847, weighed down with honors and years, still make annual pilgrimages to this medical Mecca, and by their presence and counsel add increased interest to its meetings.

Chiefest among these is Nathan Smith Davis, to whom, more than any other, is due the credit of establishing and perpetuating this National Association. Venerable, distinguished, renowned, may he be long spared to counsel and assist in the deliberations of the body!

The purposes of those who organized the Association were to protect and promote the interests of the American medical profession, to maintain its honor and respectability, to advance its knowledge, and to extend its usefulness.

That these desirable objects have been accomplished to a very great extent is a matter of history.

Through its moral influence it has united the great mass of physicians from Maine to Texas, and from the Atlantic to the Pacific in the bonds of fellowship, many of whom at great sacrifice of personal comfort and pecuniary interest, come to the annual meetings with hearty fraternal greetings for each other, and who, becoming touched as with a living coal of fire, renew their vows of faithfulness and loyalty to the cause in which they are engaged, and form the high and noble resolve to devote their time, talent and lives with still greater assiduity to their chosen profession.

If the Association had done nothing more than to have accomplished this unification of the medical profession, it would have performed a service entitling it to an imperishable name. It has, however, been an active and powerful agent in the promotion of medical science, and in the dissemination of useful knowledge.

It has excited a spirit of improvement among the masses of the profession which nothing can stay.

Another great benefit conferred by the Association was the establishment of an *esprit de corps* in the profession, by the preparation and adoption of a Code of Ethics which comprises the great principles of truth, honor and justice, in regulating the relations of physicians to each other, to their patients and to the public. It should be and is the written law clearly defined and of acknowledged force and effect that prevails from one end of the country to the other. It forms an impassable barrier between the sheep and the goats, the clean and the unclean, the physician and the charlatan.

The strict observance of the Code has done more than anything else to maintain harmony in the profession, and to elevate it in the public estimation. It embodies the true spirit of the Golden Rule: "Do unto others as you would have others do unto you."

Every one who enters the profession should be provided with a copy of the Code, and he should make it the guide of his medical life. It will serve as a talisman to the young physician, and will be the best safe-guard against the snares and pitfalls which environ his pathway in his early professional life.

It would seem that every honorable and high-minded member of the profession would be willing to endorse and be controlled in his intercourse with his medical brethren and the public by every article of the Code.

It is, however, to be regretted that there are some, who undoubtedly possess high order of talents, and are justly distinguished, who have an utter repugnance to the observance of certain parts of the Code and hold themselves aloof from the Association in consequence.

They, *probably*, are as proud of our noble profession as we, and are equally as anxious for the advancement of its interests, but can they conscientiously affirm that the motives by which they are influenced are pure and unselfish? And should they, a small minority, put their opinion against the unbiased and unselfish judgment of the wisest and most experienced in the profession? And when, too, nine-tenths of that profession endorse and are guided in their actions by the spirit and letter of the Code?

The chief object, indeed the fundamental idea of those who

originated the Association was the improvement of the American system of medical education, and the elevation of the standard of requirements for the professional degree. Never was there a greater expenditure of effort, illuminated with genius and learning to accomplish these two great objects! Never was there more eloquent and philosophical reports to any organization than those presented by the committee appointed year after year to this body; yet it seems, after all efforts in that direction, as far from fruition as at its initial meeting! The resolutions proposed and adopted from time to time were sufficiently pointed and admirably adapted to the end-in view, but, unfortunately the Association had no legislative authority or power to enforce its enactments, and its moral suasion and influence was not great enough to move the colleges to accept their counsel.

In 1850 the medical colleges were invoked to meet and correct the great evils of the prevalent plan of teaching in this country, but they did not respond to the appeal. Since then, on various occasions, delegates from the medical colleges have met and discussed plans for the advancement of medical education but have failed from want of coöperation and united action, to make the desired changes.

The idea of making such changes in the medical education of our youths, in a country so diversified and of such extent, in a few years, was probably utopian. Such radical and lasting changes can only be effected by the slow work of time. There has, however, been a gradual elevation in the standard of education, fully equal to the progress of the country in every other department of human learning.

To those of us who entered upon our medical studies twenty, thirty or forty years ago, it will be gratifying to visit any well-organized medical college and witness the many improvements and the increased facilities for the instruction of its pupils. The extended curriculum of instruction, both in didactic and the clinical departments, the patient and painstaking work in the laboratories of chemistry, physiology, pathology, and experimental therapeutics; the special instruction in the departments of surgery, obstetrics, and gynecology, and ophthalmology; the resources afforded by hospitals and dispensaries, and the admirable arrangement for the prosecution of practical anatomy in the dissecting

room, all attest the wonderful progress and advancement made in medical teaching since our pupilage.

I am ready to maintain that the advantages and facilities for medical instruction in our country even at the present time are quite equal to those of any other, and that our medical colleges have produced as able, learned and successful practitioners as ever graduated from other institutions; and while I am willing to admit that our transatlantic brothers have excelled us in experimental work, we excel in all practical departments of medicine. Chassaignac, the eminent Parisian surgeon, exclaimed a few years since, that America held the scepter of the surgical world; and more recently Virchow, President of the late International Medical Congress, said, "The American medical world to-day excels in surgery, mid-wifery and dentistry.

What American physician is not overwhelmed with thankfulness when he remembers the pain and anguish which has been prevented through the great boon of anæsthesia, which in the providence of God was given our country! Who will ever tire of hearing of the great blessings conferred on suffering women by the genius and skill of McDowell, or of marvelous changes made in gynecological surgery by the prolific brain and cunning hand of Sims!

Had America done nothing else than contribute these gifts to the world it would have been made famous for all time to come.

The great advance made in our medical education has been undoubtedly due to the frequent and very able discussions which have been held on the subject in this Association, and to the eloquent and philosophical reports of committees of education which have been so often appointed, and apparently with so little effect—but the seed so wisely sown in the organization of this body have germinated and are now of hardy growth and it is hoped in the near future will attain maturity and yield a harvest of abundant and perfect fruit.

The professional public has been aroused on the subject of a higher and better education than has been furnished by the old system, even, as improved by modern advancement. This professional sentiment has extended to medical teachers, and I believe that a majority of American medical collegess are now ready to acquiesce in the demands of the profession for a higher education

and that they will execute to the fullest extent the wishes of the Medical College Association as expressed at the meeting in Nashville last year. And when the medical colleges shall have entered upon the higher education which they have determined to do, the American Medical Association will have cause to congratulate itself in the accomplishment of the chief object of its organization.

The success of the Association in these and other purposes has been very great, even beyond the expectations of its most sanguine friends. As a social and professional reunion of kindred spirits and great minds, its memories afford perennial delight. It has given impetus to the progress of polity and science, it exercises moral suasion rather than authority, it has brought together a bright constellation of intellect, cemented the bonds of friendship among good men and true, and has formed a luminous track of light in the firmament of the Æsculapian heavens throughout the length and breadth of the land. It has passed safely through the perils of infancy, avoided the errors of youth, has entered upon the full estate of manhood, and now occupies an advanced position in the deliberative assemblies of the world. Constituted of delegates coming from every part of the country and representing every interest of the profession, it is really a great National Congress; it is the only legislative body of the profession which can regulate the action of its members and harmonize their conflicting interests; and it is full time that it should assume the power of legislating for the whole American profession and demand that its enactments be observed. That this power may be attained and exerted beneficially, greater efforts should be made to bring into the Association every prominent and influential member of the medical profession, especially those who have thought proper to alienate themselves from its deliberations. Let us ask them in the true spirit of conciliation to throw aside their narrow prejudices and renew their allegiance to the Association. Let us relegate all the asperities of the past to oblivion and remove the unpleasant feelings which have existed for the past four or five years, to the end that the medical profession of America may be, "Though distinct like the billows, yet one like the sea;" that it may be truthfully exclaimed, "Behold how good and how pleasant for brethren to dwell together in unity." Then encouraged

by the knowledge of the moral power of the Association, let us not be satisfied with what has been done in the past, but press on in the good work we have undertaken, toward perfection, securing as much beauty and finish for the body as is compatible with the imperfections of human understanding.

Now that the College Association has adopted all the requirements for improved medical education, which the Association has been so long urging, and for which, in fact, it was established, it is eminently proper, and I would urgently press its importance on members to pass a resolution that, after the changes contemplated have gone into effect, no medical man who has received a degree from a college which has not adopted the improved method of teaching, and no professor or attache of such college, shall be eligible as delegates or members of this Association.

This great moral support is due those colleges which so heartily took up the burden that the Association has carried for nearly half a century, and I hope it will be cheerfully accorded them.

It is a well-known fact that a very large proportion of the members of this body at each session come from the vicinity of the place of meeting, many of whom have never been present at the session before, and are ignorant of the parliamentary usages of the body or entirely indifferent what business is before it, or how it is disposed of; so that a few only of its members shape and conduct the entire business. Indeed, the transactions of business of the Association are uninteresting and irksome. Sometimes in the discussion unpleasant feelings are engendered and animosities formed, which interfere materially with the harmony necessary for the welfare and usefulness of the Association. I would, therefore, respectfully suggest that all business matters of the Association should be referred, without discussion or comment, to an executive business committee, composed of two members to be appointed by the several State Societies in affiliation with this body, who, after mature deliberation, shall report them back, to be adopted or rejected, as the Association may determine, and that the morning session, which has been heretofore consumed in the transaction of ordinary business, shall be occupied in the discussion of living, burning questions selected by the business or the nominating committee, and that members especially qualified to discuss the questions chosen shall be selected a year in advance, that they may

be thoroughly prepared for the duties assigned them. Such discussions will be greatly conducive to the advancement of medical science, and will attract a great number of the best medical men who are not interested in the routine business of the Association, and who are consequently never present at meetings.

To still further promote science and add to the interests of this body, I would suggest that prize essays provided for in the organization, and for so long a time ignored, shall again receive the attention they deserve. I feel sure that it is the sincere desire of every member of the Association that it progressively improve in the quality of the work it presents to the profession from year to year. There is, in my opinion, no exercise which will add more to the interests of the Association, or do more to promote science, than the presentation of essays which will be offered in competition for suitable prizes.

In this connection it may be well to call the attention of the Association to the fact that original research and experimental investigation have not received the attention from American physicians which their importance demands. Living, as we do, in a comparatively new country, our energies have been directed to the promotion of the practical, and more directly useful departments of the profession than to the minute investigations of scientific subjects, and our government, while the most liberal and best under the sun, has never seemed to comprehend that the cause of science, especially medical science, would be greatly advanced, and its own honor proportionately increased, by the establishment of schools for original investigation and experimental research. It has not kept pace with the other enlightened governments in scientific enterprises. It is hardly to be expected, however, that in the rapidly changing political dynasties, the attention of our legislators could in the near future be directed to the advancement of pure science. This must, for the present at least, be left to the progressive spirit which animates our universities, and to private laboratories which are being established in different sections of the country. Would it not be advisable for the Association to establish a Section of Experimental Research, to which young and enthusiastic devotees might be encouraged to make and repeat experiments in all the departments of medicine? It would certainly form a very interesting and useful section, and

would tend to advance science and add greatly to the interest of the Association.

It was a happy conception of one of our most distinguished Presidents to make the establishment of an Association journal the burden of his inaugural address, and so powerfully did he impress its importance upon the minds of the members of the Association, that a committee was at once appointed to take into consideration his suggestion, with the result that a weekly journal was established to take the place of the annual volume of transactions. That the change has been a valuable one, no one will deny. It has asserted and maintained the honor, dignity and power of the medical profession as a factor in civil life; it has tended to enlighten and strengthen the profession, and to lead it in the proper direction. Its design has been to represent in the broadest sense the true status and progress made in this country, and to give expression to the thoughts, purposes, and will of American physicians. It has in the short period of its existence given evidence of its power in the advancement of its purposes. Yet it must be acknowledged that, notwithstanding the great learning and untiring energies of its editors, together with the faithful coöperation of its trustees, it has never attained the ideal excellence which should characterize the organ of this great body of physicians. It may require years to bring it to the desired standard. But it should be determined here to-day that every effort shall be made to advance it to the highest standard. To effect so desirable an object it is necessary to make provision for an ample annual income. Nothing less than from seventy-five to one hundred thousand dollars should be considered ample. To some this sum may seem chimerical, but it is not. If every member of this body would constitute himself a live, active agent to solicit subscriptions from his brother physicians living in his vicinity, and to assure himself that the Journal is on the table of every doctor within his reach, and if to this is added the income which may be derived from legitimate and properly selected advertisements, the necessary fund will be assured.

Next in importance to finance is the selection of an editor, able, learned, highly educated, with ample editorial tact and business qualifications, who will devote all his time and talents to his editorial duties. He should be empowered to spend money liberally

in obtaining scientific material, original communications, translations and reviews from every part of the world. He should have absolute control in the selection of matter for the Journal; he should manage the Journal boldly, vigorously, and with an eye single to the honor and glory of the noble profession.

To such an editor a salary should be given which would make him independent in a pecuniary point of view. Not less, I would suggest, than ten or fifteen thousand dollars should be paid him annually. Then, with elegant paper, perfect typography and attractive binding, the Journal will add lustre to the Association and honor to the profession.

The necessary funds, which can be easily raised by proper exertion, will not only sustain the Journal in the best style, but will afford a sum in addition which can be used in many ways to the advantage of the Association.

The future location of the Journal is a matter of such importance as to require our careful consideration and mature deliberation. Its weal or woe may depend on the action of this meeting.

At an extraordinary session of the Board of Trustees of the Journal, called to meet in Washington City last November, it was determined to submit the question of its removal from Chicago to Washington to the action of the members of this session.

I would beg the delegates and members of the Association to consider well every side of this question before they commit themselves to a vote, and not to act too hastily in the matter. The Journal has now had its home in Chicago for eight years. Its development and growth has been wonderfully rapid. It has already become the peer of any of the great weeklies of the country, and, if properly sustained by the profession and wisely and energetically conducted by its managers, it will become the recipient of the best thought of our own country, and be the worthy exponent of the American profession. It is free from debt, and has funds sufficient to close the financial year and still leave a satisfactory balance in treasury. It has been proven that it can be more economically published in Chicago than in Washington. The Board of Trustees several years since solicited and obtained estimates from two or more publishing houses in Philadelphia, Washington, New York and Chicago. These estimates were uniformly highest in Washington and lowest in Chicago.

Chicago is a geographical and railroad centre, and is not excelled in facilities for rapid mail distribution. It is also a great medical and surgical centre and can place at the disposal of the Journal a wealth of resource second to no other city in the Union. It is the best place for advertisers to reach the profession in the Mississippi Valley and the North-west, and if the Journal should be removed to Washington, it would lose many very lucrative advertisements and would be brought into direct and sharp competition with six important weekly journals, several sustained by large and influential book houses, which occupy the field between Washington and Boston.

Washington is in no sense an important scientific, educational, or professional centre, but it *is* the great centre of American politics, to which everything is made subordinate, and it would be impossible if the Journal should be published here, to prevent its becoming contaminated by the political air with which it would be surrounded. Washington has never been a healthy locality for medical journals, for every journal which has been published within its boundaries has died early from inanition. I do not think that it is a better locality than Chicago that is wanting, but a better journal than we have.

Let us, then, as members of a profession engaged in the most beneficent and humane calling known to man, swear "by the ETERNAL" that THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION, wherever it may be located, shall be made and kept equal in excellence with any journal published in the world.

It is now time to enter upon the duties which have called us together. Let us endeavor to discharge them in a spirit of conciliation and justice. Let us act with such prudence and judgment in this meeting as will tend to unite more closely the members of this great national family. Let us not forget how rich an heritage has been bequeathed to us by our predecessors, which we should make more valuable and transmit to posterity. Let us indulge the hope that our labors during the present session will not only sustain the advance already made in medical science, but will carry us still farther onward in the great road of progress.

RESECTION OF THE ACETABULUM.

BY JAMES KELLOGG, M.D., U.S. CONSUL, STETTIN, GERMANY.

When the hip-joint, on account of tubercular coxitis, has been resected, it very often happens that the joint refuses to heal completely, whereby the function of the joint fails to re-establish itself. As a rule, this condition of things is brought about when the wound, resulting from the operation, has not healed properly, or when the wound after commencing to heal by "*prima intentio*," develops fistulas, and begins to suppurate in the deep parts of the joint, and especially in the soft parts of the thigh. Patients so afflicted, generally, have no desire to leave their beds, and when, after much suffering has pulled them down to a shadow of their former selves, they find relief in "*exitus letalis*," hastened on by amyloid degeneration of the organs of the abdominal cavity.

The above picture is one familiar enough to those who frequent the large hospitals. Especially among children do we see the fatal results, attributable to the fact that in resection of the hip-joint one often fails to remove each and every part of diseased bone. The extirpation of that part of the capsular ligament diseased, the removal of the diseased portion of the head of the femur and shaft are operations which offer no special difficulties as compared to the one required where the acetabulum, especially the bony portion, has additionally become diseased, and which has been the originating point of the hip-joint disease. Neither the cutting away of the cartilaginous covering of the acetabulum nor the scraping out of the bone will be sufficient to remove all carious parts; diseased foci will remain, keeping up suppuration, which soon undermines the health and leads to death.

Two cases of hip-joint resection, operated on in August, 1889, by Dr. Schmid, in Bethanien Hospital, returned to the hospital a few months after being discharged as cured; both patients cachectic, and, seemingly, not having many days to live. After an examination, which revealed large fistulas in both patients, Dr. Schmid determined to remove all diseased bone, which called for the radical operation of resection of the acetabulum, as the greatest part of that bone was found affected with tubercular ostitis. By experimenting on a dead body, the Doctor became convinced that the operation, though difficult, was nevertheless possible, and he at once decided to perform it on a living body.

I. The first patient operated on was one of the above, a boy, Paul B., aged seven years, whose hip-joint was resected on the 5th of August, 1889, after being a sufferer from tubercular coxitis dextra for two years. Soon after the operation, fistulas formed and suppuration set in. The health of the boy became alarming. He was emaciated to the utmost, cachectic, feverish, and generally confined to bed. No albumen was found in his urine.

Scraping out the cavity, which showed an extensive disease, was of no avail. Suppuration had increased so that in a short time the leg would have become a useless member.

On June 20, 1890, the joint was exarticulated, after a bandage had been applied to control the general femoral vessels, then the soft parts were detached from the acetabulum, partly in a sharp, partly in a blunt manner. The acetabulum was then removed by sawing through the os innominatum in three places, beginning at the horizontal ramus of the os pubes, which called for an incision parallel to the horizontal ramus of the os pubes, and at a right angle to the old resectional incision. The large vessels, together with the flap of the soft parts, were easily pushed to the inside, whereupon the ischium was sawed through, and, finally, the acetabulum was detached by sawing through the ilium at the desired point. The instruments used to complete the above were pistol saw, chain saw, hammer and chisel.

The acetabulum, being now free, was separated from the pelvic fascia, while the large cavity resulting was stuffed with iodoform gauze. The hemorrhage was moderate.

The result of the operation was a success; suppuration ceased, the cause being removed. After a few weeks the patient began

to improve. One small fistula remained, which, however, soon healed up. His general health is very good.

The soft parts have produced a stump almost as large as the stump resulting from a thigh amputation of the upper third, and it allows the application of a leather case to which an wooden artificial leg is attached. The patient is able to walk quickly and safely, without stick and without crutch.

The accompanying figure (A) shows the three separating lines. The greatest difficulty experienced in the operation was in detaching the acetabulum from the ilium.

Fig. A.



II. The second case, a girl, aged fourteen years, with tubercular coxitis of the same side as the above patient. She was resected on the 27th of August, 1889, and on the 4th of March, 1890, the hip-joint was exarticulated for similar reasons as in the above case. On the 20th of August, 1890, the acetabulum was resected.

The condition of the patient previous to the operation was far worse than in the preceding case, only skin and bones, and very loosely held together. Her case seemed hopeless, she was so far gone. After the operation she picked up, and though improved slowly, is to-day a healthy child. She is compelled, however, to use a crutch.

III. The third case, a boy, aged thirteen years, was admitted

into the hospital September, 1890, and resected, having a tubercular coxitis of the left hip-joint, of two years' duration. The foregoing operation was not a success. The wound remained open, fistulas formed, and suppuration set in. The patient was re-admitted into the hospital, and, on examination, the acetabulum was found to be diseased, which called for its resection; but, in this case, the femur proved to be healthy, so it was determined upon, by Dr. Schmid, to save the entire limb, if possible, removing only the diseased portions of the acetabulum. It may be mentioned here that the former resection necessitated a removal of a portion of the trochanter major.

On the 26th of November, 1890, the patient was prepared for his second operation. His condition was worse than on the former occasion, but it was a matter of life or death. The operation was more difficult in this case, as exarticulation had not been previously performed as in the former cases where the acetabulum had been resected, the entrance to the acetabulum was on that account not so easily entered. The femoral vessels were secured and tied as soon as exposed, and cut. Artificial anæmia was not obtained by bandaging. The operation went off smoothly. The resulting wound was tamponed with iodoform gauze. No drainage tubes were inserted. Union by first intention.

As a consequence of the removal of the acetabulum, a large cavity was left in the continuity of the pelvis into which, covered by the pelvic fascia, part of the abdominal organs were pressing. The question now arose: How and where would the femur find support in the pelvis? It was at first supposed that the patient, on attempting to walk, would cause the bone to enter the above cavity. Two weeks after the operation, the patient was out of bed and attempting to walk. The results showed a normal movement in the hip-joint.

At the present writing and, indeed, five weeks after the operation, the boy was able to walk about alone, without crutches, quickly and safely. His carriage was straight and upright; sits and kneels. The wound has healed completely with the exception of a small superficial fistula. His general health is good.

The thigh bone functionates well, and leads one to believe that it has found a firm support, which can only be explained by the fact that the cavity above mentioned had been closed up by the

coming together of the pelvic bones. This explanation was proved to be correct by comparing the measurements of the two halves of the pelvis.

The resection of the acetabulum alone, after the joint has already been resected, is certainly a dangerous undertaking, all the more as the patients are generally emaciated and cachectic; it has, though, as we are convinced, saved the lives of the patients whose cases we have just described. The third case was especially interesting, as it furnishes us with new proofs of the great inventive resources of nature.

The above operations were all performed in an aseptic manner, but without spray or irrigation. All bandages and dressings were sterilized by heat. Dry dressings were used.

CIRRHOSIS OF THE LIVER.*

BY J. T. ALTMAN, M.D., NASHVILLE, TENN.

Cirrhosis and sclerosis of the liver, chronic interstitial hepatitis, granular, hob-nailed, or gin-drinkers' liver are synonymous terms representing an inflammation of the intervening connective tissues, resulting in an induration of the entire organ. This disease was evidently known as far back as the time of Aretæus, Celsus, etc. as shown by their writings, but its present name was applied to it by Laennec, from the yellowish tint of its granulations.

He regarded these as new formations, but more recent investigations have shown it to be simply an inflammation of the connective tissue elements and a corresponding absorption of the parenchymatous structures. Hence the term sclerosis expresses more correctly the true pathological condition.

Its causes are in a sense, both predisposing and exciting. Age is the most important predisposing cause. It is preëminently a disease of adult life and onward. It occurs most frequently between thirty and fifty years of age. Some authors speak of congenital cases which must be very rare indeed. The youngest case on record, except the congenital ones, is four years.

The great prime exciting cause is the constant use and long continued abuse of alcoholic stimulants. Hence those nationalities that consume the greatest amount of alcoholic liquors abound in cases of this disease. The more constant it is taken and the more constant its form, the more potent it becomes in the production of cirrhotic inflammation. Murchison goes so far as to say that he has never seen a case that was not due to alcoholic indulgence.

*Read before the Nashville Academy of Medicine and Surgery Feb. 12, 1891.

All other writers, I believe, say it is sometimes due to other causes, notably, syphilis, either acquired or inherited, the long continued action of the malarial poison, and the introduction of phosphorus into the system. Some writers formulate the lesions of this disease into various species.

Thinking this unnecessary and confusing I discard them all and adopt only one variety, divided into three distinct stages—a stage of hyperæmia, a stage of hyperplasia and a stage of contraction. The morbid processes are the same in almost all cases—the extent, duration and results are very variable. During the stage of hyperæmia we find all the morbid phenomena characteristic of congestion of the organ. The blood-vessels are engorged, the organ somewhat enlarged and a little more firm than usual as shown by percussion and palpation. The color is dark, the capsule tense and its edges retract when incised. The stage of hyperplasia affects first the fibrous tissue around the finer branches of the portal vein, which ramify between the lobules of the liver. The size now increases very much and the firmness is more marked. The color is now a chocolate brown, the capsule still more distended and thickened. As the growth of new connective tissue advances lymph is thrown out and binds the organ by firm bands to the diaphragm and other adjacent organs. The consequent contraction of these bands gives the liver a nodular appearance, hence the name, hob-nailed. Upon incision, now, we notice little distinct red islands imbedded in the grayish-white connective tissue. This embryonic tissue soon becomes supplied with capillaries which anastomose with the minute subdivisions of the portal vein and also with those of the hepatic artery. Sooner or later this newly formed fibrous tissue begins to contract. This is due to compression, to the interference with the nutrition by obliterating the blood-vessels, and to the congestion which is present. The parenchymatous elements undergo a granular fatty degeneration in the peripheral zones of the lobules and many of the degenerated cells are absorbed. Sometimes entire lobules are removed, but generally sufficient normal parenchyma is left to maintain the functional activity of the organ until a very late period of the disease is left.

Between the extreme enlargement of the second stage and the extreme contraction of the third stage every gradation of the dis-

ease is met with. They only represent the various types in the progress of the disease. 'In the third stage, the organ is reduced to half, or less than half, of its normal size. It is now very hard and firm, and cuts almost like cartilage. At first the peripheral bile-ducts are destroyed, but later on the larger ones become more contracted and obstructed until the formation of bile is entirely stopped. The symptoms of the first and second stages of this disease are very obscure and by no means pathognomonic. Its development is very insidious.

The following symptoms, taken in connection with the history of long continued indulgence in alcoholic liquors, may serve to put us on our guard. We first notice a gradual decline of vigor. The complexion assumes a fawn color, usually there is slight jaundice, with attacks of headache, giddiness and, sometimes, even severe vertigo. The appetite gradually fails or becomes capricious, and only raw or unusual articles of food are craved. The digestion is equally capricious. There is heaviness after meals, gaseous eructations, acidity, pyrosis, nausea and, later on, vomiting of food and glairy mucus. The bowels are sometimes constipated, but usually there is a very obstinate diarrhoea. Gastric and intestinal hemorrhage is frequent, and oftentimes very severe. All the alimentary symptoms are due to the obstructed portal circulation. The stools are very offensive with the products of decomposition. They are usually of a greyish yellow or a slate color, sometimes mingled with mucus, or tarry from the admixture of blood. The spleen is said to be enlarged. Another very important, and often a comparatively early symptom, is ascites. It is caused by the obstructed portal circulation, a watery condition of the blood, and an altered condition of the capillary walls. The extent of its formation is proportionate to the contraction of the liver. Therefore, it varies from an imperceptible quantity to the enormous amount of seventy or eighty pounds. The most urgent and distressing symptom of this is the gradually progressing dyspnoea, which soon becomes fatal, unless relieved promptly by tapping. The œdema begins in the ankles and extends upward. Hemorrhoids are quite annoying. The secretion of the kidneys is at first increased but later it becomes very scant, and finally ceases altogether. Late in the disease, psychological disturbances, stupor, delirium, convulsions, and coma fre-

quently supervene, accompanied by distressing dyspnœa, and a very profuse serous diarrhœa, and the patient dies from exhaustion.

In other cases he succumbs to hemorrhage, pneumonia, acute pulmonary œdema, myocarditis, or with symptoms due to the retention of some effete products (cholœmia) in the blood. The duration of the disease depends upon the constitution of the individual, and upon his habits. It may last from six months to six years.

Space will not permit me to dwell longer on the symptomatology and diagnosis, though that is the all important part to the practitioner. These being settled the prognosis and treatment is easily mastered. The only treatment that can be of any permanent avail is during the beginning and formative stage. Remove the leading cause at once by strictly prohibiting the use of any alcoholic stimulants. All condiments, coffee and tea, and highly seasoned animal foods should be left off. The food should contain no fat, as there is not enough bile for its right assimilation. Neither should starchy or saccharine foods be allowed, as they rapidly ferment in an excess of mucus if the proper amount of bile is not present. Give him succulent vegetables, such as lettuce, celery, etc. Where no idiosyncrasy exists the skim-milk diet is the best, with a little lean meat, acid fruits and alkaline mineral waters. This done, we turn to the less important part of the treatment, viz: the medicinal.

As malaria is a presumable cause, quinine and other anti-malarial remedies may occasionally be of service. The next thing to be considered is whether or not there be any remedies that will check the formation of the overgrowth of connective tissue. Bartholow says there is. He says all those remedies which are separated by the liver from the blood have this power to a greater or less degree. These are chiefly the salts of gold, silver, arsenic, copper and mercury. The most useful of these are the chlorides of gold and mercury. During the first two stages, administer the chloride of gold in one-tenth grain doses, and phosphate soda in one drachm doses, three times daily.

After contraction has taken place, the indications for treatment are no longer curative but purely symptomatic. To relieve the ascites we employ the diuretics, the diaphoretics, and the hydra-

gogues, either singly or conjointly. These remedies may relieve for awhile, but at last the dyspnœa becomes so distressing that we have to resort to tapping to prevent suffocation. For the diarrhœa, give bismuth, copper, and other astringents, combined with opium, to prevent early collapse. Control hemorrhage by ice, subsulphate iron, and ipecac and ergot hypodermically. Topical remedies may have some utility. Wet and dry cups will relieve pain and catching respiration. Counter irritants, such as iodine, blisters or biniodide mercurial ointment may do some good.

Having made a correct diagnosis as early as it is possible to do so, and treated the case through as outlined above, we can put our name to his death certificate with a clear conscience that we have done our whole duty to our unfortunate patient.

ABSTRACT OF A PAPER ON "THE RELATION OF
DISPLACEMENTS OF THE ABDOMINAL VIS-
CERA TO PELVIC DISEASES."*

BY J. H. KELLOGG, M.D., OF BATTLE CREEK, MICH.

The purpose of this paper is to show by the study and comparison of the measurements of a large number of civilized women, including peasant women and others of the laboring classes, Chinese, American Indian, East Indian women, and ancient Greek models:

1, That the average adult civilized woman of modern times is deformed, her waist measurement being much too small for the rest of her body.

2, That this deformity, and others growing out of it, are the results of an unnatural and unhealthy mode of dress, and neglect of physical or muscular activity.

3, That the deformity of figure which the average woman presents are indicative of changes in the static relations of the abdominal and pelvic viscera, which are the source of many and serious morbid conditions and painful symptoms.

4, That in a majority of cases of pelvic diseases in women, especially cases of displacement of the pelvic viscera, the pelvic disease is not an isolated or independent malady, but only a partial or local expression of a more general disease which involves also the abdominal viscera in whole or in part.

5, That in consequence of constriction of the waist, and weakening of the lower muscles of respiration, the civilized woman has acquired an unnatural mode of breathing which tends strongly in

* Read before the American Medical Association, at Washington, D. C., May, 1891.

the direction of the development of disease of the abdominal and pelvic viscera.

6, That any therapeutic method addressed to the case of maladies of this class be successful, must include such measures as will correct the disturbed static relations of the abdominal viscera as well as the displaced uterus and ovaries, and will remove the causes of these displacements by restoring their natural supports.

In support of the above propositions, the following among other facts are presented:

The percentage of waist to height in the average adult woman is:

In East India women of Telugu, whose clothing constricts the waist.....	40.6
In English laboring women who wear tight bands and heavy skirts.....	41.3
Civilized men, America.....	43.3
French peasant women.....	45.4
Chinese women	45.4
Yuma Indian women of New Mexico.....	55.2
The Venus de Milo.....	47.6

It thus appears that the average natural woman has a larger waist than the average man, which is not surprising, since she has a larger liver, and her waist must sometimes expand still more to meet physiological requirements.

In two hundred and fifty cases of women suffering from pelvic disease, taken consecutively and without selection, in each of which a careful examination was made with reference to the condition and position of each of the abdominal viscera as well as of the pelvic organs, I observed the following disturbances of the static relations of the viscera:

In 232 cases, downward displacement of stomach and bowels.

In 71 cases, right kidney distinctly movable and sensitive to pressure.

In 41 cases, right kidney freely movable.

In 6 cases both kidneys freely movable.

In 9 cases, marked downward displacement of the liver.

In 2 cases, downward displacement of the spleen. In one of these cases the spleen lay at the bottom of the abdomen.

I have made a large number of outline tracings in cases of wo-

men suffering from pelvic disease, and supplemented these by careful examinations of the position and condition of the abdominal and pelvic viscera, and with the following results as regards the relation of static changes in the abdominal organs to similar changes in the organs of the pelvis:

In 150 cases of pelvic disease, the stomach and bowels were displaced in 138 cases.

In 66 cases, the stomach and bowels were displaced without displacement of the uterus. In 26 of these cases, there was also displacement of one kidney, and in 5, displacement of the liver.

In only 7 cases was there displacement of the uterus without displacement of the abdominal viscera, and 3 of these cases were of large uterine myoma, in which the visceral displacement was probably present but masked by the morbid growth.

Anatomical study of the means by which the uterus is kept in its normal place, suggests that it is better provided for in this respect than any of the viscera, and the data which I have collected respecting the relative frequency of uterine and other visceral displacements support this idea, by showing that the uterus is much less often displaced than any other viscera of the trunk.

The outlines of cases which are presented with the paper, confirm, in a most conclusive manner, the asserted relations between the external configuration of the body and the static relations of the trunkal viscera.

These outlines show, first, the profile of a healthy woman of good physical and vigorous muscular development. The person who furnished this outline was a German peasant woman, of twenty-nine years, who had been trained from early childhood to carry weights upon her head and, at twenty, was accustomed to carry in this manner loads of vegetables weighing ninety to one hundred pounds to a distance of three or four miles without stopping to rest. The characteristics of this figure are a strong anterior dorsal curve, hips well set back, chest prominent, abdominal muscles well drawn up, head erect, and body well balanced upon the balls of the feet.

In contrast with this figure is shown the profile of the typical case, the peripatetic invalid who spends her time traveling from one gynecologist to another without relief. The characteristics of this figure are hips forward, spine straight, abdomen pendulous,

chest flat, shoulders drooping, chin projecting, body balanced upon the heels, and a weak and relaxed expression of the whole figure. In this case the stomach, bowels, liver, and right kidney were each several inches below their proper level. Corset constriction of the waist, and the dragging influence of tight bands and heavy skirts has diminished the waist-measures and produced a most unsightly protrusion of the lower abdomen. This is not an unusual case, and is but a slight aggravation of the deformity presented by the average adult civilized woman, the significance of which will be appreciated by the gynecologist who will take the trouble to investigate the position of each of the abdominal viscera with the same care that he examines the position and condition of the uterus and ovaries.

I have made hundreds of tracings of this sort, and find an almost uniform association of trunkal deformity with displacements of abdominal and pelvic organs. It is as useless to attempt to cure these cases, by the treatment of the pelvic organs alone, as to repair a chain by mending a single weakened link when a half dozen are broken. The use of a pessary alone, to correct the malposition of a retroverted uterus, when liver, bowels and kidneys are more seriously displaced than is the uterus, proves about as unsuccessful as would an attempt to balance a hay-stack upon a pitch-fork. The abdominal viscera, pendulous through the relaxation of their ligaments and the abdominal walls, sway and swag with every movement of the patient, and instead of being buoyed up and restrained as in health, settle down about the rigid pessary thrust up among them, crowding the tender organs downward and compressing them against the unyielding support, often causing not only local pain and seriously disturbing reflexes, but not infrequently ulceration and grave local inflammation and other complications.

In view of these observations, it is apparent that the reason of failure of many cases in which operations have been performed upon the pelvic floor for shortening the sound ligaments, or for neutral fixation, is that the enormous weight of pendulous abdominal viscera is left unsupported, and, hence, the uterus is soon forced back into its old position.

I have made pneumographic studies of the breathing movements in several hundred women, including not only civilized wo-

men of various nationalities and occupations, but also Indian women of different tribes, and Chinese women. I find women whose waists have not been deformed, and their breathing muscles weakened by improper dress, breathe as do men. Chinese women and Indian women breathe as men breathe. Female dogs breathe as do male dogs. A man in a corset breathes just as does a woman with constricted waist. A dog in a corset shows the same absence of waist movement in respiration as does a woman attempting to breathe with the same restraint.

Hence, I conclude that the so-called female type of respiration is not a physiological, but a pathological condition.

By means of a modification of the pneumograph, I have obtained tracings showing the movements of the pelvic viscera during respiration. I find that these movements are greatly lessened in extent by constriction of the waist, leading to disease through loss of the respiratory gymnastics to which the normal movements of respiration subject both the abdominal and the pelvic viscera.

In the practical application of these ideas in the management of patients, I find rapid improvement in cases which had previously resisted all therapeutic attempts, in the employment of massage, Swedish gymnastics, both medical and pedagogical, and other forms of carefully graduated exercise carried out in a gymnasium under a trained director. Artificial support, electricity, operations to repair injuries, and all other useful measures are, of course, employed as palliatives and adjuvants. After sixteen years' experience with this plan of treatment, more or less modified from year to year, I am convinced that it is the only one which strikes at the root of the disorder in a very large class of cases, and the only one which can be confidently expected to secure complete and permanent success in any considerable proportion of cases.

Extracts from Home and Foreign Journals.

SURGERY.

TUBERCLE OF HERNIAL SAC.

Jonnesco (*Revue de Chirurgie*) describes several cases in which hernia was complicated by tubercle of the sac walls or of the contents of the sac. The affection seems to have attracted little attention, but cases are quoted from the writings of Cruveilhier, Hayem, Lejars, and Guinon. Jonnesco's first case was that of a young man, aged 20 years, strong and robust, who had suffered for a few months from double inguinal hernia. The left hernia seemed stationary, but the right was painful and increasing in size, in spite of the wearing of a truss. The pain increased and the patient became unable to work, and a radical operation was therefore performed on the right side. Before the operation a clearly-defined indurated mass could be felt at the bottom of the hernial sac, but independent of the contents, which were intestine and omentum. In addition to these, the sac contained a quantity of yellow fluid, and more could be pressed from the abdomen. The wound healed by first intention, and a year later there was no hernia on the right side, and that on the left being stationary. The mass at the bottom of the sac was an indurated, greyish, oval plate, which had the typical histological characters of tubercle developing in the lymphatic network. Jonnesco next quotes several cases of tubercle of the contents of the hernial sac from the writings of Puech, Largeau, and Berger, and others of tubercle of both the sac and contents. He deduces from these that the tubercle may be either circumscribed or diffuse, and that it may extend to the mesentery.—*Brit. Med. Journal*.

FOREIGN BODIES IN THE AIR-PASSAGES.

The entrance of foreign bodies into the lower air-passages is not a very rare accident, especially in children, but it is always an alarming one. The danger depends, however, largely upon the size and character of the foreign substances. These are commonly fragments of bone, kernels of fruits and nuts, spears of grain, beans, peas, nut-shells, small stones, and coins. As the result of vomiting particles of food may enter the trachea, this accident being especially common in children and imbeciles (Riegel). Fragments of pharyngeal polyps, and of tonsils, teeth, pus, blood, and other results of local disease or surgical work in the upper-air passages may pass through the rima glottidis into the trachea.

Bryant records a case in which a piece of meat became impacted in the larynx, causing instant death.

Not long ago Wharton reported a case of a child of four who had got a large brass shawl-pin into its trachea which set up a fibrinous inflammation.

A bridegroom inhaled a rabbit-bone at his wedding-dinner. His honeymoon was interrupted by a combination of laryngo-tracheotomy and artificially induced emesis. St. Louis children seem to have a fondness for getting cocker-burs into the larynx. One physician, Dr. Glasgow, has seen and removed three of them. A patient of M. Godet's inhaled a leech and spat blood for twenty days, when he was relieved by a thyrotomy.

It is well known that in rare instances a foreign body may remain in the lungs for years and cause no symptoms. Dupuytren related a case in which a coin was retained for ten years, and Professor Gross had observed a case in which a bone was coughed up sixty years after it was inhaled! Such cases as these, however, mostly belong to the older literature, before the time of the laryngoscope, and an element of doubt hangs about them. In recent times, Vainossy has reported the case of a tailor who got a needle into his lower air-passages and retained it there for ten months, when it was coughed up.

Foreign bodies in the air passages are always very serious things for the patient, and calls for courage, promptitude, and skill on the part of the surgeon. According to Mr. Durham's statistics, which include 636 cases, 41 per cent. die when no operation is

performed, and 23 per cent. when surgical interference is undertaken.

Some addition to our therapeutic resources in late years has been furnished by cocaine and by the use of the O'Dwyer tubes, as shown in a case reported by Metzger.

The surgery of the trachea and bronchi has also become more perfect, so that most cases of foreign bodies in these parts can be successfully dealt with. The case of Dr. Bothwell was one of exceptional difficulty, owing to the fact that the foreign body was a cork that swelled and became tightly impacted.—*Med. Record*.

IRRITATION OF THE MEDIAN NERVE BY THE DISPLACED FRAGMENT OF A COMMINUTED RADIUS; EXTRACTION OF NERVE; GOOD RESULT.

M. C——, aged fifty, a hale-looking country woman, whose raven hair was streaked with gray, was admitted into the Middlesex Hospital on Feb. 1st, 1883, for a sequel of an injury to her forearm sustained four months previously by a fall in which she struck this fore-arm against the edge of a stair. The radius and ulna had been broken in their lower third, and the former comminuted. Good union, with slight angular deviation of the axis of the bone, had occurred; but a detached piece of the radius about half an inch wide and somewhat longer, projected so strongly at the flexor side as to press upon and raise the integument. Here and for some distance around it there were great tenderness and pain, and severe pain was felt also in the palmar surface of the two middle fingers. She said that the pain was so intense that it made her quite unable to use the limb, and it prevented her working.

On Feb. 3rd, the projecting piece of bone was laid bare and cut away. It had pushed the median nerve—which was found resting in a groove on the outer border of the fragment—out of its normal course. A fortnight later she returned home. The wound had very nearly healed. The pain had ceased.—*London Lancet*.

TREATMENT OF SOFT CHANCRE BY GRATTAGE.

Dr. N. S. Sheshmintseff reports several cases (*Russkaya Meditsina*) of soft chancre in which good results were observed to follow scraping out the ulcer and subsequent application of a powder

containing tannic and boric acids, or of a solution of nitrate of silver, 10 grains to the ounce. He believes, as a result of this experience, that grattage of soft chancres, local anæsthesia having been previously effected, gives better results, as regards the rapidity of the cure, than any other method hitherto employed. When this is done early enough it is almost certain, he holds, to prevent the formation of a bubo.—*Med. Record.*

MEDICAL.

TREATMENT OF ULCERATED SCARLET FEVER AND DIPHThERIC THROATS BY IRRIGATION.

I have used the following method of treatment in the ulcerated throats of scarlet fever and diphtheria in the Birmingham City Hospital for about two years and a half. The appliances necessary are a small India rubber-bag syringe, 4 or 6 oz., according to the size of the patient, two small basins, and a towel. The medicament used is boric acid dissolved in hot water (about 105°F.). In order to facilitate the solution of the boric acid, I have a saturated solution in glycerine, prepared by Messrs. P. Harris & Co., Edmund street, Birmingham, of which the following are the proportions: Powdered boric acid, 4 parts; glycerine (sp. gr. 1260), 3 parts. The glycerine should be heated by steam, and the boric acid (best quality, carefully powdered) stirred in till the solution is perfect. Of this solution, a large tablespoonful is dissolved in about a pint of hot water. The method of procedure is as follows:

Place the patient sitting up, or, if too weak to sit up, place him on his side with his face over the edge of the pillow. Apply the towel round his neck to keep him dry if any water accidentally gets spilled; withdraw the nozzle from the syringe before filling it, and fill with the solution; replace the nozzle, and direct the patient to open his mouth; then put it into the mouth well over the back of the tongue, and forcibly empty the syringe; at the same time receive the water which rushes out of the mouth and nose into the empty basin. In this way the mouth, fauces,

pharynx, and in some cases the posterior and anterior nares, are irrigated. The operation is repeated till the parts are washed quite clean. In cases of purulent discharge from the nose or nasal diphtheria, the same procedure is applied to the nostrils. The irrigation may be performed every two or four hours as circumstances require.

In this hospital during two years over 1500 cases of ulcerated scarlet fever and diphtheritic throats have been treated by this method. From this experience I can recommend it as superior to any other I have tried. I believe its efficacy is due to the fact that it is founded on the rational principle of washing away of all septic discharges with a non-irritating, non-poisonous fluid. It is not in any way disagreeable to patients; on the contrary, when the mouth is dry or foul, it is most comforting. The solution is rendered sweet by the glycerine, so that only a small percentage of even very young children offer any objection to it. Occasionally children swallow some, but without any subsequent ill effects. It should be born in mind that, in order to prevent any septic matter being sucked into the syringe, the nozzle should always be withdrawn when filling.—*The Lancet*.

BILATERAL PNEUMOTHORAX.

Dr. Otto Lasius, Osnabruck, reports an interesting case of double pneumothorax (*Deutsche Med. Wochenschrift*,) in the person of a woman, aged 27, who had suffered from obstinate cough for a year and a half previously, signs of limited disease being present at the apex of the right lung. In the middle of the sixth month of pregnancy she was suddenly seized with extreme dyspnœa, the physical signs indicating pneumothorax of the upper part of the right chest, the left side being unaffected. On the following day she was delivered of a seven months' infant, which died within a few hours, but was not found to present any evidence of tuberculous disease. Three days later, with only slight increase in the dyspnœa, and with no other indicative symptoms, she was found to be the subject of a double pneumothorax, the whole of the left pleural cavity being apparently filled with air, although the percussion note varied in tone at different points. Percussion over the second intercostal space on the right side gave the impression of fluid mixed with air. Death took place in ten days from the

first occurrence of pneumothorax, and the *post-mortem* examination confirmed the clinical diagnosis. On the right side the pneumothorax was limited by previous pleural adhesions, forming two cavities with a narrow connecting channel between them, both cavities containing fluid as well as air. In addition to these there was a third cavity in the lung itself, due to the primary disease. In his commentary upon this case, Dr. Lasius discusses at great length the possible causes of the varied notes obtained on percussion, and calls attention to the very slight influence which the occurrence of the second pneumothorax appeared to have had upon the case, the rapidity of respiration having only been increased from 50 to 57 in the minute. No point of rupture could be discovered in the visceral pleura on either side.—*Brit. Med. Jour.*

NUTRITIVE VALUE OF RECTAL INJECTIONS OF EGG ALBUMEN.

The assertions of Voit and Bauer and Eichhorst to the effect that egg albumen is absorbed by the rectum only in the presence of a certain proportion of chloride of sodium, but is returned unaltered with the fæces if this reagent be absent, has led the author to investigate this point anew, and to make his observations on man, and not on dogs, as his predecessors had done. The experiments were planned with great care, and the quantity of albumen removed from the body, both by the urine and the fæces, was estimated. As the outcome of several series of experiments, the results of which show a great agreement, Huber gives as his conclusion that egg albumen simply beaten up is absorbed by the rectum, but only in very small quantities, and consequently a nutrient enema of this kind possesses hardly any value. When, however, a certain amount of common salt is added (15 grains) to each egg in the present series of experiments), the quantity of albumen absorbed is doubled. Peptonized egg albumen was absorbed in very slightly greater proportion than that treated with common salt. Of the albumen thus treated with salt, between sixty and seventy per cent. was absorbed, and we, therefore, have in this mixture an extremely valuable material for nutrient enemata.

In no case of Huber's were the enemata expelled; nor was albuminuria ever found to occur after their use.—*The Medical Chronicle.*

IODIDE OF POTASSIUM IN THE TREATMENT OF URTICARIA.

Stern has successfully treated five cases of chronic urticaria by the administration of iodide of potassium, four of the cases having been rebellious to all the measures usually employed in this disease. The fifth case was one of acute urticaria of a few days' duration. None of the patients were syphilitic, and all were rapidly cured. In one case which had lasted for four months the intolerable itching disappeared on the second day of treatment, and a complete cure was obtained after two and a half drachms of the iodide had been administered. In two other cases, one of two years' and the other of six years' duration, the effect of the iodide was equally good, cure following the administration of six and eight drachms respectively.—*Lon. Med. Record.*

ETHER DRINKING IN NORWAY.

We learn from *Sundhedsbladet*, a Norwegian health journal published in Christiania, that with the falling off in the consumption of alcoholic intoxicants, ether-drinking is becoming quite common in certain districts. The farmers buy it in considerable quantities, especially at Christmas time and on other festive occasions, and they treat each other and get drunk in the same way that they formerly did on potato or barley brandy. It is said to be drunk by young and old, men and women, in the palatial homes of the wealthy and the miserable hovels of the poor. It seems to stimulate the fashionable society belle after a night's dancing, and to still the pangs of hunger of the starving wretches. It inflames the passions of the pleasure seeking sensualists or quarrelsome brawlers and warms the shivering pauper, or at least deadens his sensibility to cold, as it also benumbs the conscience and produces mental and moral degeneration of character. We had supposed that ether drinking was almost wholly confined to Ireland, in certain parts of which it has long been a national vice, and we were hardly prepared to hear that it had enslaved the stern and hardy dweller in the land of the mighty sun.—*Pacific Med. Jour.*

THE RED-ROSE PETALS AS A REMEDY FOR DIARRHŒA.

Dr. Alexeevsky, of Tamboy, (*London Med. Record*,) Feb. 28, emphatically draws attention of the profession to a simple, cheap,

and safe method of treatment of diarrhœa, borrowed of the Russian popular medicine, and consisting in the internal administration of an infusion of the red-rose petals (*flores rosæ rubræ* or *domesticæ*.) A large pinchful of the dried flowers should be taken to each tumblerful of hot water, and the vessel (carefully covered with a saucer or any other suitable object) and left to stand in some warm place for about two hours. An adult should be given two or three tumblersful of the infusion a day, the daily dose for a child under five being a tumblerful or a cupful given by portions in the course of the day.) No sugar should be added since otherwise "the taste of the remedy would be spoiled still further."—*Boston Med. and Surg. Jour.*

THE TREATMENT OF PNEUMONIA.

Dr. W. Soltan Fenwick gives in the *Lancet* for January 31st and February 7th, 1891, an analysis of a thousand cases of acute primary lobar pneumonia which were treated at the London Hospital between the years 1880 and 1890. Those cases in which the temperature ranged above 103° are for convenience classified as "sthenic," those in which the temperature remained below 103° are considered as "asthenic" in character. The treatment of the sthenic cases was of three kinds: 1. Expectant, consisting of the application of hot poultices to the chest and the internal use of expectorant and tonic remedies. Of the 493 cases of this class, 116 were fatal, or 23 per cent. 2. With quinine, consisting entirely of the use of quinine in large doses, 12 to 40 grains per day. Of 52 cases, 11 died, or 21 per cent. 3. Antipyretic. These cases were combated upon general antipyretic principles, similar to those employed in the treatment of other acute specific fevers. Only 10 cases were treated with antipyrine and phenacetin, hence the inquiry is confined to the results which attended the systematic efforts to control the symptoms of fever by direct abstraction of heat. The various measures resorted to were the use of—

1. The ice-bag. Of 26 patients so treated, 4 died, or 15 per cent.
2. The cold pack. Of 26 patients, 4 died, or 15 per cent.
3. Cold sponging. Of 65 patients, 8 died, or 12 per cent.
4. The ice-cradle. 43 patients, 3 died, or 7 per cent.

There were 285 cases of asthenic pneumonia. Of these, 240

were treated in the ordinary way with poultices, stimulants, and tonics, the deaths were 76, or 32 per cent. In 45 cases the treatment was supplemented by large doses of quinine; the mortality was 20 per cent.

In summing up the foregoing results, Dr. Fenwick observes that the termination in the fatal cases was almost invariably directly due to failure of the heart. There are two factors which are capable of producing the condition of cardiac insufficiency—an increased resistance to the propulsive action of the heart, and a progressive deterioration of its muscular substance. In acute pneumonia both these factors are present; the former in the increase of tension in the pulmonary circuit consequent on the consolidation of a portion of the lung, and the latter as a direct result of high temperature. The action of these two forces is to compel the heart to beat more forcibly and more quickly, while at the same time it is steadily deprived of the power to do either. Treatment should therefore be directed to one special object—viz., to economize cardiac force by minimizing the injurious influences of fever. He believes that this is best accomplished in the sthenic cases by the use of cold sponging or the ice-cradle.

In pneumonia of the asthenic type cold should not be employed, but the treatment should be stimulating.

Dr. Fenwick adds, in conclusion, that the quantity of albumen in the urine during the first three days is of considerable prognostic value; of patients with a quarteralbumen, 32 per cent. died; of those with a third, 52 per cent. died; and of those with a half, 82 per cent. died.—*N. Y. Med. Journal*.

TOBACCO IN THE TREATMENT OF DIPHTHERIA.

Dr. Schwitzer, in the *Province Medicale*, says that, from observation of persons who are habitual chewers of tobacco, and noting their immunity from local infectious diseases of the throat, he was led to employ it in the treatment of diphtheria. It was used in the form of an alcoholic extract and an infusion. In small children the extract was painted on the suspected diphtheritic patches once in twenty-four hours, and for adults the infusion was used as a gargle. The author has seen no bad results follow the use of the tobacco, even in very young infants. He is satisfied of the favorable therapeutic action of this remedy, as

it has been employed by him in sixty cases of diphtheria, and in but seven of this number have the results been unsatisfactory. As a gargle, the author recommends it as being far superior to any other in this disease. To make the extract, equal parts of tobacco-juice and alcohol are used. At the time of the application, fifty parts of the extract are diluted with from thirty-five to forty parts of alcohol. For the infusion, two parts of tobacco leaves are used with two hundred of boiling water.—*N. Y. Med. Journal.*

AN AID TO PALPATION.

Chlapowski finds that for palpation of tumors of the abdomen an excellent method is to put the patient into a well-filled bath tub. The advantages gained are several: the reflex contraction of the abdominal walls is overcome; it is very easy to change the position of the body without exertion on the part of the patient; and the pain on the pressure is diminished. The author has had especially good results in determining the nature of tumors in the region of the cæcum, and in mapping out infiltration due to old appendicitis. He has also been able to determine the nature of floating kidneys, splenic tumors and different new growths, where previously the contraction of the abdominal muscle had prevented satisfactory examination.—*Boston Med. and Surg. Journal.*

EPIDEMIC RELATIONS OF DIPHTHERIA IN NORWAY.

Axel Johannessen, of Christiania, reviews the various epidemics of diphtheria which have occurred in Norway, and makes some remarks upon diphtheria and croup. He concludes that the largest part of the cases of croup which occur both before and after the great epidemics of diphtheria are of diphtheritic nature.

An interesting point is developed regarding the mode of invasion of the disease and the parts of the country affected. These, in different epidemics, have been to a certain extent the same. Density of population and such means of conveyance as railways and streets do not appear to play any part in the spread of the disease. The coast districts have one-third more cases of diphtheria than the inland districts, and the fishing districts of the coast are most affected. At Dorschfang from 25,000 to 30,000 men collect in 5,000 huts, being huddled together under bad hygienic conditions. At Tromsø-Stift diphtheria generally shows

the highest number of cases of the disease—as many as 105 per thousand of population. Moreover, statistics also show that those districts whence the fishermen are sent out and return again are invaded by the disease in proportion to the number of fishermen, a condition which is true of other epidemic diseases, especially typhoid fever.

In Norway and Sweden the morbidity in the cities is, on the whole, greater than that of the country; but usually epidemics in cities develop more slowly, and rarely reach an excessive height; whereas, it is much more frequent for an epidemic in the country to rise rapidly to a high ratio between disease and population. The mortality is absolutely greater in the cities; on the other hand, the percentage of dead of those medically treated in the country districts is considerably higher. This circumstance seems to be due to the fact that throat diphtheria is, in the country, more fatal than in the cities, where, on the other hand, a decidedly greater number of victims is furnished by diphtheria of the larynx.

The great variations in the disease curves are not primarily dependent upon meteorological influences.—*Deutsche Medical Wochenschrift*.

SARCOMA OF THE PITUITARY BODY.

Dr. Frank C. Hoyt, pathologist to the Missouri Asylum, No. 2, St. Joseph, Mo., announces the following case in the eighth biennial report of that institution :

Male, age 29, married, occupation farmer, native of the United States. Was admitted as a case of acute mania; very noisy, violent and incoherent. Had eaten very little for some days and was quite weak and emaciated. Marked hyperæsthesia and tremor of side of body was observed. He had a profuse, greenish and horribly offensive discharge from the nose, which was supposed to be ozæna. No history of syphilis could be obtained. The patient voided large quantities of urine, which was repeatedly examined and found to be free from sugar. He steadily lost ground in spite of forced alimentation, and died on the fifth day after admission, and eight months after beginning of attack.

Autopsy twenty hours after death; body much emaciated; rigor mortis barely perceptible.

The membranes of the brain were slightly adherent, but apparently normal. •The brain showed no evidence of disease until its removal from the cranium, when at the base, resting upon the sella turcica, was found a growth three-fourth by one-half inches in size and weighing about two drachms. It was firm and fleshy in character, involved the pituitary body, and was firmly attached to the membranes as well as the osseous structures. Upon removing the tumor, the sphenoid was found to be very soft and disintegrated, and the cells of this bone, the ethmoid and the frontal sinuses, filled with broken down bony tissue and greenish offensive pus.

Microscopical examination of the growth proved it to be a round celled sarcoma. The disease of the bony structure was an extension of the malignant growth, and was the cause of the discharge from the nose. The polyuria would indicate irritation of the floor of the fourth ventricle, from the pressure of the growth, and it is at least corroborative of the theory that polyuria is of central origin.—*Med. Mirror.*

OBSTETRICS.

IODOFORM GAUZE IN POST-PARTUM HEMORRHAGE.

Dr. Velitze, of Buda-Pesth (*Orvosi hetilap*) describes thirteen cases where he employed plugs of iodoform gauze for flooding, during and after delivery, and in two cases in the course of the puerperium. He finds that iodoform gauze is a perfectly aseptic medium in obstetrics. It is of permanent value as a hæmostatic in flooding from atony of the uterus. Only a small amount of gauze should be packed in the uterus, so that retraction of that organ may not be hindered. Iodoform gauze is useless, and indeed dangerous, in uterine hemorrhages due to abnormal condition of the blood. Being hygrometric it promotes hemorrhage. In this form of flooding weak solutions of perchloride of iron act best. Hemorrhage from high laceration of the cervix can only be safely checked by aid of the suture. When bleeding occurs after delivery or late in childbed, through the presence of a fibroid,

the only effectual check is a thorough plugging of the uterine cavity with iodoform gauze; the cavity must be well stuffed with that material.—*Brit. Med. Journal*.

BIRTH OF A VIABLE CHILD AT SIX MONTHS AND A HALF.

Dr. H. Collyer reported a case of this nature. The woman was thirty-three years of age, had been married eleven years, and had had four children at term and one miscarriage. She had been under the speaker's care for chronic pelvic peritonitis, which fact had given him opportunities for observation in the case that he might not otherwise have had. On July 5, 1890, she menstruated as usual. On August 6th there was a scanty flow for three days. During the third week in August changes were noticed in the uterus characteristic of the earlier weeks of pregnancy. The woman stated that conception must have occurred July 13th, denying its possibility before that date. On January 4, 1891, while she was working a sewing-machine, there was sudden and profuse hemorrhage. All attempts to prevent labor were futile and on February 3rd, she was delivered of a small male child weighing two pounds and two ounces. The child cried at once, and wrapping it up warmly, the speaker waited for some five minutes till pulsation in the cord had ceased before separating the child from its mother. The placenta gave some trouble, and there was found attached to it an independent lobule. The bones of the child's skull were soft and overlapping. The testes had not descended, and the finger nails were only just showing. The infant was wrapped in wool and put into a basket, which was placed near a fire kept continually burning. At first the child was fed with milk and water from a spoon every two hours and subsequently from the breast. It had since continued to thrive in every respect. The date at which the child was born and the general condition of its development would indicate the period of gestation as six months and a half.—*N. Y. Med. Jour.*

A CASE OF EXTREME HYDRAMNIOS

Hy. C. Pauli, Luton, Beds, writes: Late one night I was called to see a Mrs. A., aged 41, who was expecting to be confined of her eighth child, the messenger saying she was in great pain and "did not know what was the matter with her." I found the

woman in great distress and embarrassment of breathing, which had been increasing for the previous two days. Her legs and the lower part of the abdomen were very dropsical, her face also was puffy. The uterus was enormously enlarged. The os, about the size of a florin, was high up, and no presentation could be felt. By means of a straightened hair pin I punctured the membranes, and immediately the liquor amnii began to rush away, to the great relief of the woman. I caught most of the liquor in a wash-hand basin, and with it more than filled a three gallon pail, the overflow running through the floor into the room beneath. After four or five hours' rest, labor terminated quickly; the child, which was male, lived two days. The woman made a good recovery, all dropsy subsiding.

She accounts for her condition by trouble, being much reduced in circumstances. I did not see the placenta, it being destroyed before my second arrival. The woman suffers from chronic rheumatism and mitral regurgitation. The measured quantity of liquor amnii was 24 pints, besides what escaped on the bed and floor—probably 2 or 3 pints.—*Brit. Med. Journal*

SUBCUTANEOUS INJECTIONS OF ETHER IN PUERPERAL ECLAMPSIA.

An interesting supplement to the treatment of puerperal eclampsia, is offered by Dr. Perron. The case recorded was that of a primipara, twenty years old, who was seized with eclamptic convulsions two hours after delivery. Chloral in liberal doses, blood-letting, and even inhalations of chloroform, had been tried without avail. The convulsions, which had begun at eight in the morning, continued with unabating severity to return every half hour until noon and then became almost unremitting. The patient lay convulsed with severe dyspnoea and deeply cyanosed, her breathing was labored and stertorous, and death was momentarily expected. Dr. Perron then injected subcutaneously a syringeful of ether, and in a few minutes the respirations became more regular and less labored. Fifteen minutes later, another similiar injection was made, and a third injection two hours later. After the second injection the convulsions ceased entirely, and the patient made a speedy recovery. It is to be noted that no albumen was found in the urine.—*Med. and Surg. Reporter.*

LARGE UTERINE TUMOR EXPELLED BY THE VAGINAL OUTLET.

Dr. A. H. Goelet narrated the history of the case of a patient, unmarried and forty-two years of age, who had been sent to him in February, 1890, by Dr. M. Smith, of Brooklyn. She had a large interstitial fibroid in the anterior wall of the uterus, as large as an eight-month gravid uterus. The uterine canal measured seven inches and a half. After several months of treatment by intra-uterine applications there was only a difference of an inch in the waist measurement, and, as this was not very encouraging to the patient, she discontinued treatment. Her menstruation, which previous to the commencement of treatment had been quite painful, was now normal and free from pain. A short time after returning home, and after taking three or four doses of ergot, of 15 drops each, for the control of a bloody discharge, which had persisted after menstruation, the patient was taken with severe pains, of a paroxysmal character, in the tumor. This condition continued for a week, and subsequently she was seen by Dr. Smith, when it was found that the uterus was evidently attempting to expel the tumor. She then came again under the care of the speaker. The tumor was in due course expelled by the vaginal outlet and the patient had made an uninterrupted recovery. The result was not such as could have been expected and the process hardly one to be desired in the case of large tumors of this kind, but it had at least shown what might be accomplished under unfavorable circumstances by careful management.—*N. Y. Med. Journal.*

IDIOCY AND THE OBSTETRIC FORCEPS.

A work has recently appeared, by Drs. Winkler and Bollaen, of Utrecht, entitled "*Der Forceps als Ursache von Idiotismus*" (*Brit. Medical Journal*). They bring forward two cases to prove that the forceps may cause so much damage to the foetal cranium as to damage both its development and the substance of the encephalon itself, the result being idiocy. In the first case, symmetrical areas of damaged cortex were found on the surface of the hemispheres. The subject had been delivered by forceps, but no depressions on the calvaria were detected. Since the case occurred, ten brains of idiots were examined after death, and in two

the same symmetrical affection of the cortex was found. The calvaria of no fewer than six of the subjects exhibited the characteristic depressions, and presumably most at least of these depressions were caused by forceps. The second of the two thoroughly investigated cases occurred in an idiot dwarf, delivered by forceps, there were deep symmetrical depressions on the calvaria close to the sagittal suture.

The history was well traced, for the patient died of old age at sixty; she had resided for forty years in the Utrecht Lunatic Asylum, and never could say more than two words. The cortex and deeper tissues were extensively diseased immediately under the cranial depressions. The entire encephalon weighed only 742 grammes. The authors wish it to be understood that they base no fanatical doctrines against midwifery forceps on the strength of their researches. They go further, and note that it is known that the prolonged pressure of the maternal bony pelvis on the foetal head is certain to inflict damage, whilst the forceps carefully employed usually causes no injury of any kind to the child.—*Boston Med. and Surg. Journal.*

VOMITING IN PREGNANCY.

Pombrak has employed with success menthol with sugar of milk for the treatment of the vomiting in pregnancy. He has also used tincture of iodine for the same purpose. The case in which he employed menthol with advantage was that of a highly nervous young woman suffering with chlorosis—*Journal de Med. Paris.*

Editorials, Reviews, Etc.

PUBLISHER'S NOTICE.—The JOURNAL is published in monthly numbers of *Forty-eight pages*, at one dollar a year, to be always paid in advance.

All bills for advertisements to be paid quarterly, after the first insertion of the quarter.

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All communications for the JOURNAL, books for review, exchanges, etc., should be addressed to the Editor.

THE AMERICAN MEDICAL ASSOCIATION—FORTY-SECOND ANNUAL MEETING.

The annual meeting of the national association was held in Washington, D. C., three days, commencing May 5th.

The attendance was large and representative. The various general addresses appointed for the occasion, were notably excellent, and were well received. The work in the sections was, without exception, of a high order, and the discussions interesting. The President, Dr. W. T. Briggs, of Nashville, Tennessee, was highly complimented for the skillful manner with which he presided over the large body. His address is given entire in another part of the JOURNAL. Among matters of general interest to the profession at large may be mentioned :

1st, The proposed removal of the Journal of the American Medical Association from Chicago to Washington. An overwhelming majority decided against removal.

2nd, The adoption of a resolution, and its reference to a com-

mittee, for the Centennial Celebration of the Discovery of Jenner, the place selected being Chicago; the time May 14, 1896.

3rd, The appointment of a committee to memorialize Congress for the establishment of a new Cabinet Officer, the Secretary of Public Health.

4th, The appointment by the Trustees of the Journal of Dr. J. C. Culbertson to the position of Managing Editor of the Journal. A wiser choice could not possibly have been made. Dr. Culbertson, for many years, has conducted most successfully the *Cincinnati Lancet-Clinic*, one of the liveliest medical journals in this country, and we feel sure the Association Journal will increase in usefulness under his skillful guidance. He is a facile writer, an advanced thinker, and a fearless champion of the right. We congratulate Dr. Culbertson upon his deserved elevation and the Journal upon its acquisition.

5th, The movement to establish a Pan-American Medical Congress took definite shape in the appointment of a committee, consisting of Dr. Reed, of Ohio, Chairman; Dr. Carhart, of Texas, Secretary, and Dr. Love, of Mississippi, Treasurer, as a committee to report at an adjourned meeting, at St. Louis, October 4th.

Dr. Henry O. Marcy, of Boston, Mass., was elected President; Dr. H. Palmer, of Wisconsin; Dr. W. E. B. Davis, of Alabama; Dr. W. P. King, of Missouri, and Dr. W. E. Taylor, of California, Vice-Presidents; Dr. R. J. Dunglison, of Pennsylvania, Treasurer, and Dr. W. B. Atkinson, of Pennsylvania, Secretary. Detroit, Mich., was selected as the next place of meeting.

THE MEDICAL EDITORS' ASSOCIATION.

The meeting of American Medical Editors, held the evening previous to the opening of the general session of the Association, was well attended. The President elect, Dr. F. L. Sim, of the

Memphis Medical Monthly, was unavoidably absent, and the meeting was presided over by the Vice-President, Dr. Frank Woodbury, of Philadelphia. A number of new members were admitted. The following officers were elected for the ensuing year: President, Dr. Frank Woodbury, of Philadelphia; Vice-President, Dr. C. H. Hughes, of St. Louis; and Secretary, Dr. J. C. Culbertson, of Cincinnati.

The subject selected for the next meeting was—"The best interest of the medical journal from a literary stand-point."

THE HOSPITAL OF THE GOOD SHEPHERD.

The new building of this well-known charitable institution, conducted under the auspices of the Episcopal Church, was thrown open to the public Wednesday, May 19th. It is a bijou of a small hospital, everything being new, well selected and well arranged. It is situated in the southern part of the city, having as a site a beautifully shaded hill, overlooking all that part of the city. Sister Eliza, for a long time connected with the hospital under the old regime, is in charge, and has associated with her a number of competent nurses. The consulting staff of the institution is as follows:

PHYSICIANS.

W. A. Atchison,
M. H. Bonner,
J. S. Cain,
R. Cheatham,
W. J. McMurray,
N. D. Richardson,

SURGEONS.

C. S. Briggs,
J. R. Buist,
R. Douglas,
Duncan Eve,
G. W. Hale,
G. C. Savage.

We are gratified at the liberal response to sample copies sent out with the last number of the JOURNAL to the profession of the State. We indulge the hope that many who have received such

numbers are only waiting for an opportunity to forward subscriptions. We again send out an extra edition of sample copies, and trust that every physician receiving a copy may think it to his interest to send one dollar, and thus avail himself of the opportunity to become a subscriber to a first-class medical journal.

The list of subscribers to the JOURNAL is becoming larger and larger, and it is to be hoped that before many more numbers are issued we can rightfully claim the largest subscription list of any southern journal. Fill out the blank enclosed, with one dollar, and become a subscriber.

The death is announced of the distinguished Dr. Joseph Leidy, of Philadelphia. in the 68th year of his age, which took place April 30th. Dr. Leidy was one of the most celebrated anatomists of the nineteenth century, and was in other respects a savant, of whose reputation the American profession has a right to be proud.

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Original Communications.

SUGGESTIONS ABOUT ABDOMINAL AND PELVIC
SURGERY.*

BY WM. H. WATHEN, M.D., OF LOUISVILLE,

Professor of Abdominal Surgery and Gynecology in the Kentucky School
of Medicine, Gynecologist to the Louisville City Hospital, etc.

The recent contributions upon abdominal and pelvic surgery are probably more numerous and practical than upon any other department of general or special surgery, still there is a variety of opinion as to the best methods of treating pathological conditions within the peritoneum, or as to the immediate or permanent results of the many procedures that have been practiced. This is especially true of pelvic surgery, where we find in the practice of the most experienced and successful operators accidents during the operation, and complications following it, for the prevention of which, there is no united opinion as to the correct technique to

*Read before the Obstetrical and Gynecological Section of the American Medical Association, May 8, 1891.

adopt; nor is it always possible to explain why troublesome complications occur in one case and do not occur in another apparently similar case. Careful observation and experience may finally teach us much wisdom in these matters, and I will ask your kind indulgence while I briefly allude to a few things that may be of value, if carefully discussed by the members.

There is too much laparotomy done, and too many men are doing it; men who know too little about the diagnosis and pathology of abdominal or pelvic diseases, or about the best technique in operating, and have few facilities for doing such work. Continuously good laparotomy work cannot be done except by men who largely devote themselves to this department of special surgery, and with such men some cases are operated on where the indications do not justify it. The appendages are sometimes removed for vague nervous troubles, where there is no disease of the ovaries or tubes, or peritoneal adhesions. Such cases are made worse and are mutilated in a way that cannot be corrected.

The pendulum has swung too far, but many of our best operators are earnestly urging upon the medical profession that the operation is not indicated except in cases where there is well defined disease that has resisted, or will resist, other more conservative means.

As the experience of an honest surgeon widens he operates relatively less frequently, and he can recall cases that he does not believe should be operated on. An honest, intelligent and careful man may, when young in observation and practice, make mistakes in the selection of suitable cases for laparotomy, but this is less frequent than it was a few years ago. It is criminal to do dangerous or capital operations while ignorant of the best methods for doing such work, or for the purpose of adding a little cheap glory to our reputation, or to report cases that apparently recover from the immediate effects of the operation as permanently relieved before the final results can be appreciated. Such men usually have many bad results or deaths that they do not report so promptly, and the profession, or the people, seldom hear much about them.

I have reported but a small minority of my successful cases, but have promptly reported my bad results or deaths, because by a careful study of such cases we finally do better work, by learn-

ing how to avoid or prevent complications or accidents that may cause the death of our patient. Reported recoveries in simple cases of laparotomy do not always indicate superior or unusual skill in the operator. Such reports are of little value to the medical profession, and may indirectly result in the death of many women by influencing ignorant men, with no facilities for such work, to attempt it because of its apparent simplicity.

What I may say relative to the technique, etc., of laparotomy refers to cases where the conditions are manifestly such as positively indicate the necessity for the operation.

In preparing for an operation the physical and mental condition, and the hygienic and sanitary surroundings of every patient should be made as perfect as possible under existing circumstances, and unless absolute surgical cleanliness is observed in everything that may come in contact with the wound or peritoneum, septic infection may follow.

Some operators, who talk a good deal about antisepsis, do not know how to be surgically clean, because they have not learned to appreciate the value of cleanliness in every detail before and during the operation. The infection often comes to the patient by the neglect of little things, without the strict observance of which no one can be a successful abdominal surgeon. The danger from atmospheric infection is practically nil, as has been shown by Kummel and others, and by the continuously good results in operations done in large amphitheaters before several hundred students. It may be possible for septic matter to reach the peritoneum through the intestinal walls, but this has not been proven. A spray of antiseptic solution is not necessary, and if strong enough to kill pathogenic germs supposed to be floating in the atmosphere, it is positively poisonous if used during an abdominal section.

Some men who use the spray, Don Quixote-like, while pursuing an imaginary foe, allow the deadly enemy to enter through numerous neglected channels—the hands, sponges, sutures, instruments, etc. Every operator should, of course, observe the broad principles that make the foundation of all good surgery, but if he neglects the details he will be disappointed in the results. Asepsis is more easily accomplished in well-regulated private or public hospitals or infirmaries. In private houses septic matter

may more readily be introduced unless the operator, or an experienced nurse, rigorously superintends everything before and during the operation.

That we may better appreciate the practical significance of my position as to what constitutes asepsis in laparotomy, I will give some of the methods before and during an operation. I prefer not to operate in a room where the patient is afterward to stay, and when I am compelled to do so, if delay is admissible, I have the room thoroughly cleansed and ventilated for twenty-four hours before the operation, but use no spray or other means of disinfection. When it can be done I operate in a room at St. Joseph's Infirmary, specially prepared for laparotomy work and so arranged that everything in or about the apartment can be kept aseptic with but little care. The operating tables for the surgeon and nurses have plate-glass covers, and the trays for instruments and pans for sponges and dressings are white porcelain-lined.

Everything is carefully cleansed before each operation, and the operator and his chief assistant take a bath and put on clean linen, and white aprons reaching from the neck to below the knees and extending entirely around the body, so as to prevent the hands from coming into contact with anything unclean. The towels are carefully washed and boiled and are used for no other purpose. Soft and well-shaped sponges, free from sand and grit, are selected, and, after being carefully washed, are made aseptic after the method of Greig Smith. Eight ounces of bisulphide of soda and four ounces of oxalic acid are dissolved in a gallon of water, in which twelve to twenty sponges are immediately immersed and kept for ten minutes; they are then washed by frequent changes of water for one hour, so as to get out all the sulphurous acid and sulphur. This is quite a labor, but it insures perfect freedom of septic matter. They are then wrung out of the water and put into a clean cotton or linen bag, so as to keep out the dust while drying. When dry they are put in large ground glass-stoppered bottles or jars, and may be kept indefinitely in a pure condition.

Sponges once used may again be made aseptic by the same process, but I prefer not using them a second time if they have been soiled in septic matter. If a sponge comes in contact with any-

thing that may be unclean, it is not used until again prepared. Chinese hard-twisted silk of three sizes is used. It is purchased in unbroken packages and wound loosely on separate glass spools. These are put into glass test tubes which are stoppered with a piece of absorbent cotton and then sterilized. They are kept in the sterilizer for an hour, for three consecutive days. The silk is now so free of bacteria that a culture could not be made from it, and if the cotton is not removed it will stay in this condition. Each tube contains enough silk for a laparotomy. The silk and needles are kept during the operation in sterilized water at a temperature of 212 degrees. This may not be necessary, but if the cotton has been partially displaced from the tube it would be a wise precaution.

In the same boiling water I keep the small glass drainage and the large irrigating tubes. As our hydrant water is generally muddy, I use sterilized water and always have it boiled before operating in vessels kept for this special purpose. The instruments are washed with sapolio or some strong soap, and boiling water is poured over them, when I begin the operation. The hairs of the brush are pushed through the eyes of the needles, and the holes in the instruments so as to get away all poisonous matter. It is well to have instruments, towels, dressings, etc., sterilized for an hour before using them, but they should be thoroughly washed before sterilization.

The patient is given one or more hot baths by a well-trained nurse, the vagina and rectum are washed with copious injections of hot water, and the pubes are shaved. Before making the abdominal incision the abdomen is again washed with soap and brush and wiped off with sulphuric ether. Dry towels, covered by towels wrung out of boiling water, are placed over the abdomen, so as to prevent anything possibly unclean coming in contact with the hands or any of the appliances used. The nails are closely cut, and the hands thoroughly washed with brush and soap before the operation.

The nurses in charge of the sponges, needles and sutures are as aseptic as the operator. I use no antiseptic solutions, but use for sponges, instruments and hands boiled sterilized water, kept as hot as can be borne. If everything is aseptic we do not need antiseptics, and they may cause general or local trouble. I will

refer to but a few points in the technique of the operation. Adhesions are carefully separated close to the tumor or structure to be removed, or the uterus, to prevent hemorrhage or wounding the intestines or bladder. Adherent intestines should be separated, if possible, otherwise the operation is incomplete, and the patient will not probably be permanently, if at all, relieved.

The patients sometime suffer more after the operation than before it, because of the extensive adhesions induced by uncleanness, antiseptics, or traumatism committed by a careless operator. I believe adhesions will be fewer if antiseptics are absolutely excluded from the operating room, and are not even used for the instruments or the hands. This may seem heterodoxical to many, but I have arrived at this conclusion after experience and careful observation. If the instruments and the hands are clean we need no antiseptics, and if they are unclean the solutions will not cleanse them or prevent infection, but may so irritate the peritoneum as to cause few or many adhesions. It will require more experience to decide how much damage is done in this way. Blood, pus and all foreign matter should be removed, and great care should be practiced to prevent rupturing a pus sac or cavity in an operation for their removal.

When any foreign matter except blood has gotten in to the cavity it should be thoroughly irrigated with hot sterilized water.

This is not only the best way to cleanse the peritoneum, but it is also an excellent means of preventing or treating shock. This may be done by attaching one end of a three-foot piece of gum hose to a glass tube, and the other to an iron-granite funnel, into which water is copiously poured and forced by hydraulic pressure through all parts of the abdomen and pelvis.

The drainage tube is sometimes invaluable, but if improperly used it is capable of doing much mischief. There are many cases in which it is indicated. There are many in which it is not. It should be used if we close the abdomen before hemorrhage has ceased, or if foreign matter, that is possibly septic, has got into the abdomen. It should be attentively cared for and frequently emptied with a long nozzle syringe, by a well-trained nurse. It should be very small and light, with open end, and numerous fine openings on the sides. It should be carefully placed, and long enough to enter to the deepest part of the pelvis.

After the dressings are especially applied around the tube a twelve inch square piece of gum dam with a small hole cut in the center, should be closely fitted around the neck so as to keep the dressings clean. If a piece of absorbent cotton is kept over the mouth of the tube and held in position by folding over the gum cloth, it will absorb discharges and remove the danger of sepsis from the introduction of pathogenic germs. It should be removed when soiled and a new piece used.

Some of our best-known laparotomists use too large drainage tubes and do not protect the dressings and the wound by the gum dam. A small tube will usually drain as well as a large one, and it does not subject the patient to so many dangers.

While it has been shown by Grawitz that the peritoneum may render harmless, and dispose of pus or pathogenic germs, it would be reckless to expect it to do so when we may supplant the efforts of nature by the use of a drainage tube through which irrigation may be used if needed. The long nozzle syringe, or a syringe with a small gum tubing attached, affords the best means of emptying the tube, and this can be done aseptically. The practice of trying to drain the peritoneal cavity by introducing strips of gauze or wick into the tube to its bottom, or allowing shreds to enter the cavity, as practiced by German laparotomists, is bad surgery, and may be the means of introducing septic matter. While aseptic gauze may usually drain efficiently it sometimes prevents drainage and causes the blood to coagulate in the tube. This is especially true where capillary drainage is attempted by the use of the wick. I have never seen coagulation where the syringe was used. Probably the most correct exposition of the methods of drainage in Germany will be found in the paper, "Drainage in Laparotomy," by Saenger, of Leipzig, at the recent meeting of the Tenth International Medical Congress, at Berlin. No mention is made of protecting the dressings from the discharges by the use of gum dams, or of removing the secretions with the syringe.

Vaginal drainage, with possibly a few exceptions, should never be attempted, though Dr. August Martin, of Berlin, and other German operators frequently practice it. It can accomplish nothing more than supra-pubic drainage, and subjects the patient to greater dangers from sepsis. The tube should be removed as soon

as the conditions will admit, and when bleeding has practically ceased, and there is only a small quantity of clear inodorous liquid removed, it is no longer needed. If the tube has to be retained more than forty-eight hours, it should be rotated a little twice daily, so as to facilitate drainage by preventing obstructions in the small openings.

The dressings need not be disturbed to remove the tube, and in a few weeks the place where it was introduced can be scarcely detected. And ventral hernia will not occur at this point more easily than at any other part of the incision. Hernia in any case will seldom occur if we are careful to unite the ends of the abdominal fascia. This may be done by the deep suture if the fascia is drawn out and the needle correctly introduced, but the separate suturing of the fascia is more reliable.

Recognizing the fact that in laparotomy work death is too often caused by septic infection, and that this can nearly always be prevented, I am deeply in earnest in my desire to aid in impressing upon the medical profession what I conceive to be the best means of preventing the introduction of septic matter. As death occasionally follows prolonged anesthesia in organic diseases of the heart, lungs and kidneys, we should carefully examine these organs before we decide to operate.

A CASE OF PUERPERAL CONVULSIONS.

BY A. F. BINKLEY, M.D., NASHVILLE, TENN.

March 20th, about 8 o'clock, a. m., there came a messenger, hastily summoning me to go to see Mrs. T., stating that she was having fits. On my arrival, which was soon afterwards, I found she had had two convulsions and was in the act of going into the third paroxysm, which gave, of course, a poor show for a close physical examination. I soon learned that she was pregnant, but what stage of gestation could not be ascertained, though she had passed through the quickening stage some two or three months, and also that she had been dreadfully frightened and worried on account of a forest fire, which came some ten or twelve days before, very near their house, and in fact there was imminent danger of their house and premises being burned.

As soon as the convulsion was off I administered 20 grs. ipecac, which soon caused emesis; then gave chloroform and laudanum, also 15 grains calomel and 1 grain podophylin. The convulsions continued, returning every few minutes. Then I called Dr. J. J. Hallums in consultation, who advised, and with whom I agreed, to resort to venesection. So we took one-and-a-half pints of blood from the left median cephalic. But I should remark, however, that the patient had sometime before this become so uncontrollable that we were unable to administer medicine per orem, and it was with great difficulty that we managed to use the lancet. We, therefore, commenced with morphia, hypodermically. We used as much as two-and-a-half grains in three hours, which had the effect to quiet her for intervals, but the convulsions continued, though farther apart, and we both were called home, which was two or three miles away. During our absence she grew worse, and Dr. J. B. Walton was called on the 21st, at 4

o'clock; and, under such emergency, administered 25 grains hydrate of chloral, morphia (hypodermically), and 30 grains of calomel, and she became more quiet, and slept some.

We commenced on the morning of the 22nd injecting into the bowels warm soap-suds, continuing until about one gallon had been thrown in, without any movement of the bowels, and there had been none, nor passage of urine, from the time of the first convulsion. Then, soon after noon of the 22nd, we used an enema composed of aloes, 10 grains; podophylin, 1 grain, and fluid extract of ergot, 25 drops. On the morning of the 23rd, at 4 o'clock, she urinated freely, and at 5 o'clock her bowels commenced moving, and moved seven times in the next hour, and then she swallowed medicine for the first time (with the exception probably of once) for over sixty hours.

At 7 o'clock, a. m., 23rd, a child was still-born. The child was in the first stages of decay. All signs of convulsions then passed away, and she made a speedy and complete recovery, and on July 23rd, the following year, she gave birth to a healthy living child, without any symptoms of convulsions.

In conclusion I might say that this case is very much easier for me to diagnose now than it was at its beginning, or at any time during its progress. I think this was a case of cerebro-spinal reflex irritation of uterine origin, and not uræmic, as some think all cases are. I did not keep an account of the number of convulsions, but think she must have had as many as thirty from first to last.

MODERN WOUND TREATMENT.

BY H. O. MARCY, M. D., BOSTON, PRESIDENT ELECT A. M. A.

The following abstract of Dr. Marcy's paper was read at Washington.

Owing to recent discussions in the journals of both England and America, raising afresh the question of the comparative values of antiseptic measures, applied to the treatment of wounds, Dr. Marcy's article is both timely and valuable, and received the well-merited attention of the Section on Surgery. Few surgeons are more thorough masters of the subject than Dr. Marcy, who is well known as an authority upon questions pertaining to wound treatment.

Dr. Marcy calls the attention of the profession to the valuable original researches of the late Professor Jeffries Wyman, of Cambridge, published in 1862 and 1867, upon the sterilization of organic infusions by means of prolonged boiling. He justly criticizes the position taken by Mr. Tait, whose recent statements, as published in the *British Medical Journal*, Feb. 14, 1891, "That the germs of decomposition exist already in the blood and are ever present, but do not bring about their results till death, or some condition which we may call a tendency to death, gives them permission so to do," are unscientific, and have been so often disproved by the most judicial investigators, that the task were useless were it not that he is so often quoted as one whose opinion is entitled to consideration.

Dr. Marcy carefully reviewed the whole subject from a scientific standpoint, and concludes "that the better method of wound treatment has a fundamental basis of a strictly scientific character, the three most important factors of which are: First, the vital resistant power of the individual; Second, the character and

amount of the bacterial infection; Third, the local condition of the tissues at the seat of implantation of the seed. The idea of treatment of wounds is certainly the restoration of the conditions of the parts operated upon to as nearly as possible their primal state. If this can be effected *aseptically* then there are no bacteria to be removed, and if the wound is surgically clean with accurate coaptation of the sundered tissues, then the vital forces are sufficient to utilize any resultant exudations, and drainage is not alone superfluous but harmful. The reparative processes should go on under a dressing which will permit of the introduction of no foreign factorage.

“The various antiseptic dressings, now so generally employed, have a value in wounds necessarily drained, that is wounds subject to a probable infection, but in *aseptic* wounds primarily closed, they are unnecessary, expensive, and cumbersome.”

A CHILD'S ARM ENGAGED IN THE FENESTRUM OF THE OBSTETRIC FORCEPS.*

BY DAN MILLIKIN, M. D., HAMILTON, O.

Nearly a year ago I attended a woman who had borne four dead children after severe and complicated labors, each time under the care of a different physician. She had also borne one living child, which owed its existence to the fact that it was very small and was, probably, prematurely born. This woman, half through her sixth pregnancy, came to me and consented to the induction of premature labor. Thereupon she passed from my notice, changed her plans upon ill advice, and summoned me when labor at the term had progressed for more than two hours.

When the cervical tissues were in proper condition, a careful examination of the case was made under an anaesthetic. Finding a head of moderate size, above the brim of the pelvis, in left occipito-anterior position, I was sure that I could deliver it with forceps in spite of a slight asymmetry and a shortened antero-posterior diameter of the pelvis. In this opinion I was all amiss, for it was afterward demonstrated that the child could not be delivered in that position, and it also appeared that it could be delivered easily feet foremost. But this error of judgment is somewhat apart from my present business.

Four fingers were passed into the vagina and the forceps were carefully guided to the sides of the child's head. They were easily locked, and were never inclined to slip. It may be remarked that they were my pet instruments, with broad blades and strong curves, cephalic and pelvic.

*A paper read at the Washington Meeting of the American Medical Association.

No effort was made to induce pains by traction. The pains were vigorous but separated by unusually long intervals. For this reason, and because the woman's condition was excellent, the effort to deliver by the forceps was much prolonged.

When finally it was attempted to essay delivery by podalic version a state of affairs was presented which, so far as I can learn, was unique in obstetric practice. The upper blade of the forceps, that one which passed to the right side of the woman's pelvis, would not come out. The lower blade was withdrawn first, but still the other would not come away. Then my hand passed into the uterus, revealing the fact that the child's right hand had passed through the fenestrum of the blade, and that, in fact, the blade hung on the bend of the elbow as a basket hangs on one's arm. The blade could not have been withdrawn without internal manipulation.

Presently, when the child had been delivered by the feet, it was seen that violence had been done to the fore-arm alone, and that the injury was near the elbow. No bones were broken, but the soft parts were terribly crunched. Undoubtedly, if the instruments had been long and stiff, and if it had appeared proper to compress the head severely, the arm would have been chewed off entirely.

Endeavoring to draw some warning from such a sorry job, we may note, in the first place, that the accident could only occur during a supra-pelvic application of the forceps. The arm, to attain the position in which I found it, must have lain for a moment with its palmar surface on the convex surface of the forceps-blade as it was about to be applied to the head; then the hand must have dropped into the fenestrum; and, finally, the fore-arm must have been flexed upon the arm by the final thrust of the blade home to its position. All of these evolutions require room, and could only occur above the brim.

In the second place I would remark that the accident cannot be diagnosed unless the head and arm are so large that suspicion would be excited by the great mass between the forceps. In my case the forceps were easily introduced and locked with the greatest ease; the handles were approximated as much as in average cases; there was no disposition to slip, neither when the forceps were in my hands nor in the hands of my skilled associate, Dr.

Geo. C. Skinner; the child's head and points of the forceps were repeatedly palpated through the thin abdominal and uterine walls, and no suspicion of the queer complication arose in our minds. I cannot believe that the most expert obstetrician could have detected the presence of the arm in the fenestrum before the attempted withdrawal of the instruments.

For this reason I am ready to inquire whether the fenestrum has any reason to exist. What is it good for, anyway? It has been said in most of the systematic treatises that the fenestrum gives lightness to the forceps, but this proposition, which is at first glance very plausible, admits of question. Give me a solid blade that is admittedly too heavy, and I can lighten it either by grinding it thinner or by cutting out a fenestrum. If I cut out a fenestrum I weaken the blade, and I may need to thicken the remaining metal to restore the lost strength. In any instrument shop we may find examples of forceps which appear to have passed through this line of development; they are light blades with big fenestra and thick metal. And, after all, what signifies a little weight in obstetric forceps? Ordinary instruments, fenestrated or not, do not weigh more than a pound, and one could easily make a long pair of crushing instruments out of a pound-and-a-half of steel. Surely the brother who cannot carry a pair or two of this weight is not fit to be out at night alone, much less to use the forceps.

On behalf of the fenestra it has been said that they permit prominent parts of the head to engage in them—the parietal eminence, for example—in such a manner that the forceps occupy no available room, take a much better hold upon the head, and obviate the tendency to slip. To this it may be answered in the way of disputation, that it is a remarkable streak of luck, and nothing but luck, when the prominence on a child's head project into the fenestra. It may be said, further, that the forceps rightly chosen and rightly used for the case in hand, do not occupy any available room nor, when in use, increase the diameter of the child's head measured between the blades. Fenestrated or non-fenestrated, they *make* room, moulding the head by compressing it to such a degree that were they of double thickness they would still find room. And, finally, as to the slipping of the forceps, it may be said that when they show an inveterate tendency to slip, the forceps or the operator should be changed; there is some-

thing amiss in the fit, the application or the manipulation.

And it may be urged further, that when we cut fenestra in our forceps, we increase to total amount of edge surface. Examining a child's head after severe forceps extraction one will find that the narrow rim of metal about the fenestrum has shown a tendency to actually cut into the tissues of the scalp. Not only the outer convex marginal edges make their mark, but also, in a lesser degree, the inner concave edges which bound the fenestrum.

But, waiving the question as to whether the fenestrum has any reason to exist, I think that my mishap in the case cited gives us reason to abandon operations above the brim with forceps having wide fenestra.

Proceedings of Societies.

GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE.—April Meeting.

The President, Dr. Henry M. Wilson, in the chair.

Dr. Wm. P. Chunn related a case of ascites, which he treated by tapping and permanent drainage, with apparently good results.

Dr. B. B. Browne operated, more than a year ago, upon a woman with ascites, who also had an abdominal tumor, which proved to be papillomatous. There had been no return of either the dropsy or the papillomatous growth. He referred to the many cases of laparotomy and washing out the abdominal cavity.

Dr. Geo. W. Miltenberger could not see why any malignant tumor should not be able, by irritation of the serous membrane, to cause ascites. We often see ascites without any definable cause, and when a growth did exist it seemed a very good reason for the presence of the fluid. He referred to the case of a colored woman operated upon by Dr. Neale.

Dr. L. E. Neale said that in the case of the colored woman referred to, there was no assignable cause for the ascites except the presence of a sub-serous uterine myoma. At the operation he removed the uterine appendages. The growth remained, but there was no return of the ascites. There were also a complete procidentia, but after the operation he was enabled to keep the uterus in place with a soft rubber ring. The tumor gradually diminished, and ultimately disappeared.

Is the exposure and irritation of the serous membrane during the operation a sufficient explanation of such an alteration in its function when the apparent cause of the ascitic extension remains? He thought the question eminently important and practical in its bearings, and that it required further elucidation.

Dr. Wilmer Brinton remarked that in a case of cirrhosis of the liver, in a male patient, tapping for the ascites had been followed by a permanent opening, which persisted until the patient's death, one month afterward.

Dr. J. Whitridge Williams, in referring to Dr. Moseby's remarks, said that the ascites accompanying papillomatous growths was considered to be due, in great part, to direct exudation from the vessels of the growth. He also referred to tubercular peritonitis.

Dr. B. B. Browne exhibited a small tumor, about the size of a large hickory nut, and apparently a fibroid, which he had removed from a point a little to one side the median line and between the clitoris and urethra. It pressed on the urethra, interfering with micturition. The growth was easily shelled out, and the patient did perfectly well. It was the first growth of the sort he had seen in that locality.

Dr. Neale related a case of imperforate rectum, in a white male child, naturally born at full term, of healthy parents. The child was puny, weighing only $5\frac{3}{4}$ pounds at birth, and one inch within the anus the rectum was imperforate. Dr. T. Harvey operated upon the child when it was two-and-a-half days old, very feeble and partly cyanosed. No anesthetic was used. Anus was out through, the perineal structures laid open, the coccyx removed, the rectum opened through its posterior wall just above the imperforate part and its mucous membrane stitched to the skin just behind the original anal aperture. The stitches sloughed out and the large wound healed slowly by granulation. A copious discharge of flatus and meconium occurred during the operation, and the tympanitic abdomen disappeared.

Profound shock and collapse followed the operation, the child lying motionless, the feet and lower limbs cyanosed, the face and head less so, jaw dropped, mouth opened, eyes closed, lids blue, surface temperature but little if at all lower, no cry. The features were frequently pinched or wrinkled from pain, becoming more or less blue at irregular intervals.

In this condition the child would make no effort at suction, but would swallow two teaspoonfuls at a time of milk and brandy when poured into its mouth, rarely refusing to swallow and never vomiting the food and stimulants, which were given freely and frequently. For nearly two days-and-a-half did it remain in this

state, partially rousing during the administration of food or other disturbance and again relapsing. Even after this period, when the first decided improvement occurred, the child would frequently relapse and remain in this condition for hours at a time. The first two weeks of its life was passed in this manner. The digestive and urinary apparatus functioned normally,

From the 10th to the 14th day these attacks gradually diminished and ultimately disappeared.

The child is now nearly two months old, but very feeble, and weighs only $5\frac{1}{4}$ pounds. It has been reared chiefly on condensed milk. The dense cicatrix just about the seat of the imperforation has to be dilated daily with the finger. Another operation will be necessary. No diagnosis of abnormality in vascular system could be made.

Dr. Brinton mentioned a case of a child which lived nine or ten days with an open ductus arteriosus.

Dr. Miltenberger said that in Dr. Neale's case the sphincter and anus were perfect. On intraining his finger to the end of the cul sac he felt what appeared to him the end of the gut.

He thought that no cardiac trouble could account for the symptoms in the case. The cyanosis would not clear up entirely and then recur. He did not consider the condition one of collapse. There was no feebleness of pulse or coldness of surface. The child would lie in an apparently comatose condition, with no evidence of sensation and then recover. The first attack followed immediately the operation, and evidently from shock, but after two or three days it could not be attributed to this cause. There was no chill or febrile condition.

After the child had commenced taking food he used quinine by inunction, and also small doses of dialyzed iron, and, as he believes, with benefit from the latter.

He was inclined to account for the condition in this way: A very feeble child had food forced upon it for eight or ten hours, and when it had taken in all it could, it apparently fell into a condition similar to that of hibernating animals, and when the supply of food was exhausted it would recover and take more nourishment. The condition entirely disappeared after the first two weeks.

Selected Articles.

THE IMPORTANCE OF GONORRHŒA AS A CAUSE OF INFLAMMATION OF THE PELVIC ORGANS.*

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When, in 1872, Dr. Noeggerath for the first time published his views on this question under the titled *Latent Gonorrhœa in the Female Sex*, so obviously exaggerated were some of his statements that, as he himself subsequently admitted, they "were not received very favorably by the medical press." Four years later, namely, in June, 1876, he returned to the subject, by reading a paper before the American Gynecological Society, entitled, "Latent Gonorrhœa, especially with regard to its Influence on Fertility in Women." This was apparently a reproduction of his original views, and the same exaggeration of statement characterised it. It will be convenient to give here his conclusions as the formulated expression of his views. They are as follows:

1. "Gonorrhœa in the male as well as in the female persists for life in certain sections of the organs of generations, notwithstanding its apparent cure in a great many instances.
2. "There is a form of gonorrhœa which may be called latent gonorrhœa in the male as well as in the female.
3. "Latent gonorrhœa in the male, as well as in the female,

*Read before the Section of Obstetric Medicine and Gynecology at the Annual Meeting of the British Medical Association held at Birmingham July, 1890.

may infect a healthy person either with acute gonorrhœa or gleet.

4. "Latent gonorrhœa in the female, either the consequence of an acute gonorrhœal invasion or not, if it pass from the latent into the apparent condition, manifests itself as acute, chronic, recurrent perimetritis or ovaritis, or as catarrh of certain sections of the genital organs.

5. "Latent gonorrhœa, in becoming apparent in the male, does so by attack of gleet or epididymitis.

6. "About 90 per cent. of sterile women are married to husbands who have suffered from gonorrhœa either previous to or during married life."

These conclusions were at the time of the reading of the paper severely criticised by men who represented city and country practice. One gentleman used the *naïve* but pertinent argument that "he had ascertained in conversation with twenty different physicians who acknowledged having had gonorrhœa in early life, and that in no single case had any such symptoms as had been referred to been developed in their wives, and all had had large families of children."

Before the publication of this second paper, the late Dr. Angus Macdonald reported some cases in support of Noeggerath's views. Regarding these I will only say that while Sinclair quotes them with full acceptance, Sanger refers to them as instances of wrong diagnosis.

After the detailed criticism of Noeggerath's second paper by Chadwick, the first to enter the field was the late Dr. Thorburn, of Manchester, who took up the challenge in a paper read before this Association in Manchester in August of the following year, on "Latent Gonorrhœa as an Impediment to Marriage." In contradiction to the conclusions arrived at by Noeggerath, Dr. Thorburn "appealed to the statistics of 81 private families carefully collected by himself. He showed that there had been 33 per cent. of male gonorrhœic infections previous to marriage, 26 in all; and taking all the cases of abortion, sterility, uterine and pelvic inflammations and living births that had occurred in these 81 families, he showed conclusively that there had been the merest fractional difference in their proportion between the previously and not previously infected classes. As regards inflammatory pelvic affections, the balance was fractional in favor of the non-gonorrhœic."

Hitherto opinions on the subject of gonorrhœa were based on clinical investigation, but Neisser's publication of his observations on the gonococcus (in 1879), which had been discovered ten years previously by Hallier, the question entered upon a new phase; the literature of the subject soon assumed large proportions, and the microscope usurped the place of clinical observation. The fortune of war fluctuated between the supporters and the opponents of Neisser's views, yet so much in favor of the opponents that Neisser himself has, in the meantime, been compelled to modify his original views, just as, according to Sinclair, "Noeggerath has lived to greatly modify his first impressions." Confusion entered upon the scene when Bumm, of Würzburg, announced the discovery of more than one diplococcus—five in all—exactly similar to, and indistinguishable by the individual form alone, from Neisser's gonococcus. This state of confusion was not diminished when Kammerer stated that he had found the gonococcus in the fluid obtained from the knee-joint affected with gonorrhœal rheumatism. Nor did it tend to clear up the subject when Kroner, of Breslau (in 1884), formulated his conclusions as the result of his observations on 92 cases of ophthalmia neonatorum that there are two forms of blennorrhœa, between which he is unable to make out any clinical difference. On the same occasion Säger, of Leipzig, stated that the hope aroused by the discovery of Neisser that in the gonococcus we should find a means of diagnosing chronic gonorrhœa had proved to be vain, that it was established as a fact that gonorrhœa could exist without the demonstrable presence of gonococci, and that while the absence of gonococci proved nothing against the gonorrhœal nature of the disease, the presence of diplococci, "seeing there were several varieties indistinguishable from one another," did not prove the gonorrhœal nature of the disease. (Here Säger distinctly throws over the microscope in favor of clinical observation). Such is the force of Säger's statements, that Sinclair is constrained to say "that there can be little doubt as to the difficulty of finding the gonococcus in chronic gonorrhœa in women. In cases of only a few months's standing, most certainly gonorrhœal in their nature, which have been under treatment, it has been almost invariably impossible to discover the gonococcus, however numerous other bacterial forms might be. If this be established as a fact by gen-

eral experience, the sooner it is recognized as a fact the better." This has an important bearing on Noeggerath's statements as to the incurability of this affliction. Fortunately, at the present day, we are spared the trouble of refuting these and other statements, for Noeggerath has now (that is, since 1887) given up these pessimistic opinions on the incurability, which Sänger, in 1884, had declared to be no longer tenable, as to the proportion in which married men who have this disease infect their wives, and the frequency of sterility.

But as if to render confusion worse confounded, in the following year (1885) Fränkel published his observations on non-gonorrhœal colpitis in children, in which he found diplococci which were in every respects identical with the gonococcus. In this he was confirmed by Cseri, of Budapesth, who, in the examination of the discharge in twenty female children from 2 to 10 years' of age, found in every case a large diplococcus, bearing a striking resemblance to Neisser's gonococcus. In his opinion both cocci appeared to be biologically identical. The discharge also was very contagious, and he mentions a case in which a nurse lost her eye through accidental infection in the act of syringing a child affected with the disease.

Such, then, is the confusion in which a reliance on the microscope has landed us, and, although we are told that a method has been discovered by which the true gonococcus can be distinguished with certainty, yet the test is so delicate and complicated that it is practically of little use. It is evident, then, that we must fall back on rigid clinical observation in order to arrive at definite and exact results.

In the study of this subject contradictions meet us on every hand. When we come to the question of the manner in which the disease spreads from without inwards, opinions are equally divergent. Observers are even at variance as to the part played by the gonococcus itself. Thus Bumm affirms that gonorrhœic para- and perimetritis cannot be explained by the action of gonococci; he says there must be another agent, and to account for these conditions he starts the theory of "mixed infection," that is, the addition to the gonococcus of one or more forms of bacteria. It would be unprofitable to dwell upon this question.

Again, to account for the obscurity surrounding so many cases

of supposed gonorrhœal infection, and to explain away the absence of direct clinical evidence, the theory of "latent gonorrhœa" was advanced by Noeggerath, and it may be assumed that it was this idea which led him to adopt those pessimistic views and make those exaggerated statements from which he has since been obliged to recede. Sinclair has warmly espoused this theory, and, in my opinion, to such an extent as not merely to weaken, but in many respects to effectually destroy, his argument. After describing the chief points in a fairly typical case, he tells us that the "symptoms and signs of the disease vary greatly." These are reached either through a more or less acute attack subsiding into the chronic form, or by a gradual development of the creeping form of gonorrhœal invasion, in which, he it observed, "an acute stage either does not exist, or altogether evades observation." The explanation, he says, "is sought in Noeggerath's idea of latent gonorrhœa in the male." The virulence of the gonorrhœal infection appears to depend upon the number and vitality of the gonococci contained in the infecting matter. In an acute attack the number of the gonococci in the secretion is at its highest "with corresponding vigor and vitality of the organism." Hence the infection is conveyed quickly and with certainty." "At the other end of the scale you have the sort of attack produced by the infecting matter, from a man who has been the subject of an acute attack many months, perhaps years, before. Yet we have heard that in cases of only a few months' standing, and after treatment, it has been almost invariably impossible to discover the gonococcus." To explain away this absence of the gonococcus in old-standing cases we find the most extraordinary theory we have yet come across advanced, namely, that "the gonococci are few and decrepit, probably altogether absent from the periodic emissions of a continent man. It is only the post-nuptial sexual excess that rouses them into sufficient vigor to be harmful." To say that this is a mere speculation, and totally opposed to all analogy, is a mild way of expressing dissent, and one is inclined to re-echo the words of Angus Macdonald, when, in speaking in general terms of Noeggerath's views, he said: "I must confess, however, that I cannot help feeling convinced that he proves too much." I have already called attention to the difficulties surrounding the task of demonstrating the presence of the gonococ-

cus, and although Neisser says he has discovered it as long as three years after the acute attack, yet most investigators have failed to find it a comparative short time after the disappearance of the acute symptoms.

Once more, to account for the signs and symptoms of the disease in the absence of the gonococcus, Snger has advanced another speculative idea, namely, that of "a spore as the permanent form of the contagium." Even Sinclair characterises this as "a mere hypothesis."

Coming now to the more practical aspect of the question, the same divergence of views is observed. Taking Dr. Sinclair's monograph as an excellent summary of this subject, we find the following. Speaking of the acute form, he says: "In the female the urethral form never occurs without other portions of the genital tract becoming involved," a very strong statement, on a par with what follows, namely: "but the converse proposition is not true; the uterus may be affected, and the most serious complications may develop in the pelvis without the patient ever having noticed any discomfort in micturition." That is a proposition to which I am unable to accord my assent; for it seems to me a strange doctrine that, while the disease extends with the greatest facility from the urethra upwards to the uterus, it meets with obstruction in the opposite direction, in both cases the vagina merely serving as the impartial channel of communication. For it is acknowledged to be "still" a question whether there is any such thing as a "gonorrhoeal vaginitis." The very opposite conditions commend themselves to my mind as at least more reasonable. But inconsistency follows upon inconsistency, for he maintains that in the acute form of gonorrhoea in women the ordinary typical attack extends to the cavity of the uterus, but there is still room for doubt whether, in the ordinary typical case, the process also involves to some extent the tubes, "ovaries, and pelvic peritoneum," but he firmly believes that such an extension of the disease is by no means unusual, though it ordinarily disappears without recognition. "We sometimes find that the peritoneum has been reached in a remarkably short period from the time of the patient's first contact with the infecting discharge, but as a rule the process takes from two to three months, while it still may be considered in the acute stage." Yet he admits that a general per-

tonitis, as a result of gonorrhœal infection, must be a very rare occurrence.

How very forcibly this contrasts with his opening sentences, in which he says: "Gonorrhœa, as it occurs in the female sex, is still in this country strangely neglected by general practitioner and specialist alike. Its symptoms, the ravages which are its immediate or remote results, are hardly recognised or understood." Yet the virus of this disorder gives rise to a group of diseases, a series of pathological conditions, which, by reason of their social and moral consequences, surpass in importance any other class of affections with which the gynecologist is called upon to deal." Surely this is the language of exaggeration, which seems to be fatally connected with this subject. Would that Dr. Sinclair had been more mindful of the sentiment thus expressed in his own words. "It is necessary to guard against exaggeration, for there is a danger that in rousing from long ignorance and neglect of the subject, the professional mind may sway to the other extreme, and, amidst the phenomena of disease, obscure in their nature and as yet inexplicable, be tempted to accept gonorrhœal infection as an easy and sufficient explanation of morbid processes with which it has no kind of casual relation."

Now, I would not for a moment have it even suspected that I am desirous of minimizing the importance of this disease, much less of denying its power of evil, or that it is capable of producing salpingitis, with its various results, ovaritis and pelvic peritonitis, even to a fatal termination, yet I must insist on a more rigid adherence to the teaching of facts actually observed.

It is at least a strange fact that I have never seen a case in which I could obtain incontestable confirmatory evidence that a case of salpingitis, pyosalpinx, much less hydrosalpinx, ovaritis, or ovarian abscess, was of gonorrhœal origin, although I take every precaution so that the history of each case of disease of the appendages where I operate should be as complete as possible. But there is no reason why I should refuse to accept the well-authenticated evidence of other observers. Even Sânger, who admits the frequency of gonorrhœal salpingitis, goes so far as to say that "gonorrhœal salpingitis" is never followed by a "destructive sup-puration" of the uterine appendages; it remains invariably a disease of the surfaces of the mucous and serous membranes. While

engaged in the special study of this subject for the purpose of this discussion, in which I acknowledge my special obligation to the labors of my friend, Dr. Sinclair, already referred to, I have met with several cases of interest.

About the same time I was consulted by two patients, whose conditions and symptoms were such as to lead me to make special inquiries. In both there was a copious greenish-yellow discharge, with redness of the orifices of the vulvo-vaginal glands, and well-marked evidence of tubo-ovarian mischief, in the tenderness, enlargement and apparent fixation of the appendages; in A. on both sides, in B. on the left side only. Sterility existed in both cases, four years in one and nine years in the other. In the case of A. the following facts were obtained. A great deal of "whites" before marriage; after three or four months discharge became more abundant, and instead of being white became yellow; about the seventh or eighth month experienced pain on sexual connection; on one occasion the act performed in the early morning was more than usually painful; in the course of the day while out walking was seized with some pain in the left ovarian region, felt sick and fainted; was laid up for a week and never has been well since.

She was the second wife of her husband. He had had gonorrhœa three times before his first marriage, his wife bore him two children without any untoward result, but died from heart disease in her third pregnancy, undelivered at 8½ months. He had not even exposed himself to disease after his first marriage.

In the case of B. the physical conditions were very similar with the exception that the pelvic disease was limited to the left side. On the question of gonorrhœa I requested her usual medical attendant to obtain information for me. His answer is emphatic. He (the husband) completely denies ever having had any ailment whatever of this nature and, what is more strange still, tells me that "he was virtuous, never having known woman until his marriage."

In both these cases we have a train of signs and symptoms which tallies very closely with those which are to be found in cases quoted as undoubted examples of gonorrhœal infection, even to the redness of the orifices of the vulvo-vaginal glands, the copious, greenish-yellow leucorrhœa, dysmenorrhœa and pelvic mis-

chief. But he would be a bold man who would assert that gonorrhœa played any part even in the first case.

On the other hand, I have recently seen with Dr. Campbell Pope, a patient who had contracted gonorrhœa from her husband, and at the time of her first confinement some years ago had an abundant crop of syphilitic warts, not only on the external parts, but also in the vagina. She was very ill with pelvic mischief for many weeks, but ultimately got well. At the time of our consultation she was ill again with pelvic symptoms (threatened puerperal fever) after a premature confinement, the fourth pregnancy since her first illness. Here the symptoms following her first confinement may fairly be set down as the result of gonorrhœal infection, but this did not produce sterility; and I am not prepared to accept Sinclair's dictum that "the woman who has suffered from gonorrhœal perimetritis is barren."

It is to my mind very strange how Noeggerath and those who think with him ever could have come to the conclusion that gonorrhœa plays such an important part in the production of sterility in the face of the large number of cases of ophthalmia neonatorum that are due to gonorrhœal infection. If this view were well founded, then the infection must have taken place after the pregnancy had begun. Otherwise we must assume that it is only a coincidence or an accident that gonorrhœa and sterility ever stand in the relation of cause and effect.

My own observations fail to supply me with a single instance in which gonorrhœa has produced sterility in the male. One striking example comes before my mind of a gentleman whose wife was barren. This fact might be seized on as a case in proof were it not for the fact that he was anything but impotent or sterile in the case of another woman, to my certain knowledge.

As the result of my inquiries at the Lock Hospital and amongst numerous general practitioners, I have failed to find any evidence to support the statement that this disease "gives rise to a group of diseases, etc., which surpass in importance any other class of affections with which the gynecologist has to deal." In the Lock Hospital I was informed by the house-surgeon that he was unaware of a single instance of pelvic disease following gonorrhœal infection. General practitioners tell pretty nearly the same tale of numerous examples of gonorrhœa in young men—marriage, no

evil consequences. Listen to what the late Dr. Bumstead said in the fifth edition of his work on Venereal Diseases, in a very short notice of Noeggerath's extreme views, one in which he employed a weapon which according the French proverb, is so deadly—namely, ridicule. He said that at one of the annual meetings of the British Medical Association one of the speakers announced that Dr. Noeggerath's views were so generally known and accepted in America that one of the first questions asked by the parents of every lady to whom marriage was proposed by a gentleman, was whether he had ever had the clap: "In short," he adds, "even if 800 out of 1,000 men have had the clap, the human race did not die out long ago, but still exists, and shows no tendency, as far as I know, to diminution." But a more sober testimony—and it is the last quotation I shall trouble you with—on the authority of Sinclair, is that offered by Martineau, who, after a very long experience and an enormous amount of material from which to form conclusions, says: "You will find by a close examination of the material that primary uterine blenorragia is extremely rare. In about 2,000 cases I have seen it only ten times at most. You will find, further, that ovaritis and salpingitis are so rare that I have not been able to pick out a single case. As to pelvic peritonitis, I have found it only twice." My opinion, then—an opinion founded on my own observation and on a study of the literature of the subject—is that "the importance of gonorrhœa as a cause of pelvic inflammation" consists in the fact that in a few or limited number of cases it seems to be capable of producing most serious symptoms, rarely, however, terminating in death, and that this importance is diminished by the fact that these cases are comparatively very rare.—*Brit. Med. Journal.*

Extracts from Home and Foreign Journals.

SURGERY.

EXTRACTION OF BROKEN NEEDLES.

All who have had much to do with this minor operation know how frequently a satisfactory result fails to be obtained unless the indications for a safe operative procedure are strictly observed. It is most unpleasant, after cutting and probing with the finger and forceps, to be obliged to tell a patient who has endured some pain and much discomfort that further attempts are useless, and that the fragment is still there; and perhaps suggest as the best consolation that the needle has a more free opening by which to work its way out. I have for many years declined to cut unless I could make out the situation of a point, and that the other end had a firm bearing to rest upon; giving the assurance that patience and watching are the proper treatment for the time being.

Lately I have adopted a very simple, painless, and reliable plan, and have regretted that I had not thought of it in many previous instances. Last autumn, when I was visiting a child, a young lady, his sister, came into the room using her right foot naturally, but resting only on the toes of her left foot, and explained that she had gone about in this way for fully three weeks, as she had broken a needle in her left heel, and the slightest touch gave her great pain. The point of entrance was visible in the middle line in front of the tuberosities of the os calcis; the end of the fragment could be recognized through the skin, but the slightest pressure made it recede. I declined to operate, but directed that two thick corn plasters, one on the other, should be

applied, with the puncture occupying the central hole, and that she should walk freely and bear well upon her heel. This she did with perfect ease, and after ten days the needle presented, and was withdrawn readily. It was the eyed end, and almost an inch long. Soon after this I saw a little girl, aged three years, who when away from home in the summer had also trodden upon a needle, which broke and entered between the ends of the metatarsal and tarsal bones. A surgeon saw her, promptly cut down, and tried for some time to extract, but failed. She often felt no inconvenience, but at intervals limped suddenly, and complained of pain. She was persuaded to wear a corn plaster, and after three weeks the portion of needle, which had been in more than three months, after producing a little superficial irritation, showed itself and her nurse drew it out. The wrist and ball of the thumb are not unfrequently punctured, and if the fragment enters obliquely, or lies close to arteries or nerves, and cannot be forced into prominence, attempts at extraction are, to say the least, undesirable; whereas by adopting this simple method, after the manner of removing a thorn with the pipe of a key, and producing pressure with a elastic wristlet or slight steel spring like a small truss, the fragment will work out, and not give pain from any knocks while under the skin. In that awkward position, the soft parts by the sides of the ligamentum patellæ, this plan can be used. It recommends itself to everyone's common sense, and has the great advantage of not leaving any cicatrix.—*The Lancet*.

EFFECT OF QUININE ON THE HEALING OF WOUNDS.

Dr. Sokoloff has published some interesting observations on the effect of quinine administered to a wounded animal on the granulation and cicatrization of the wound. The experiments were conducted on rabbits. The fur was shaved from a portion of the paw, and an incision made through the skin and into the muscular tissue, the external wound being then sewed up and the whole dressed antiseptically. Subsequently microscopical observations were made on sections including the wound. Twenty-four rabbits which were experimented on in this way were treated with hydrochlorate of quinine, half a grain of which was given per diem for each kilogramme of body weight. A similar number of control rabbits were operated upon in precisely the same manner,

but were not given quinine. Dr. Sokoloff gives a detailed description of the microscopical appearance observed each day for eight days in the two sets of cases. The effusion of blood was much the same in both, but there was a marked difference in the condition of the muscular tissue. In the control animals this lost its striped character, the portions in the immediate vicinity of the wound presenting the appearance of an amorphous homogeneous substance containing here and there a few muscular fibres or breaking up into separate pieces as in coagulation necrosis. Besides this, the muscular tissue gradually disappeared, leaving sheaths of sarcolemma either empty or filled with cells. In contrast to this state of things sections taken from the animals treated with quinine presented little or no sign of muscular degeneration, the fibres preserving their proper structure. With regard to the cellular elements in the control animals, two forms were found in the neighborhood of the wound—a large number of multi-nuclear leucocytes, and a much smaller number of large round or oval cells with a single large nucleus. The mean diameters of these cells after three days were 19μ and 16μ , after five days 17μ and 13μ , and after eight days 18μ and 15μ . During this period the nuclei presented various karyokinetic figures. In animals treated with quinine there were no multi-nuclear cells, all being oval, with a single nucleus and smaller than the corresponding cells in the control animals, the mean diameters being after three days 13μ and 10.5μ , after 5 days the same, and after eight days 14μ and 11μ . The cells were, moreover, more numerous than in the control observations. In the quinine-treated animals the karyokinetic process commenced and finished earlier than in the others, the chromatin filaments being also less numerous but thicker. Altogether there was less inflammation with quinine than without; in short, without quinine there was Zenker's degeneration, with quinine none.—*The Lancet*.

RADICAL CURE OF HERNIA.

A. Köchler (Report of Bardeleben's Surgical Clinic, Centralblatt f. Chirurgie, 1891). A new procedure is suggested to replace the purse-string suture hitherto employed, in which the hernial sac is employed as a "stopper" for the hernial opening. The sac is completely loosened from the spermatic cord, the peripheral

end is removed and the balance is slit into three or four strips. These are rolled up separately, with the surface which presented to the wound (the external surface of the sac) outward, and each roll is sutured, to prevent unrolling, by means of catgut; finally, all the rolls, together with the pillars, are sutured together, and the wound is closed by buried sutures. In subsequent cases the rolls were not stitched to the pillars, but were crowded into the abdominal cavity, and the latter sutured over the opening of the ring.

The "stopper" should press against the internal ring, but not press into the inguinal canal.—*The Brooklyn Medical Journal*.

A CASE OF REMARKABLE SURGICAL INTEREST.

A switchman in a retired part of one of the yards of the Chicago and Northwestern railroad picked up the arm of a man which had been crushed off at the shoulder joint and having on it a shirt sleeve.

Diligent search was made for the owner of the lost member, but nowhere could he be found, nor could any clue to the accident be discovered. Five days after the accident the police found the man at Clyborn, five miles from the scene of the injury, exhibiting his mutilated shoulder in proof of his arm having been cut off by a train. This exhibition he had made in twenty or thirty saloons for the purpose of obtaining whisky. During all the time no dressing had been applied, or any vessel tied. He was sent to a hospital and recovered perfectly. On examination it was found that the arm had been torn out of its socket, leaving the other elements of the shoulder, the clavicle and scapula, intact.

The forcible ablation of the arm has often occurred by machinery without any serious loss of blood, but the shock usually renders the patient helpless, and the surgeon invariably feels it his duty to ligate the crushed vessels. The marvel, however in this case, was the ability of the man to travel about for five days, realizing neither shock nor bleeding. It is not improbable that had one or two days more elapsed without a dressing, fatal bleeding would have ensued from sloughing of the crushed vessels, such sloughing often being delayed as late as the seventh day.—*University Med. Magazine*.

STATISTICS OF STOMACH AND BOWEL RESECTIONS.

At the International Medical Congress last year at Berlin, Billroth reported the results of stomach and bowel resection. He gave the statistics of 124 resections which had been made in his clinic from 1880 to 1890 ; of which 83 were by himself, 3 by Wolfier, 8 by Hacker, and 15 by Saltzer and Eiselberg. The cases were all chronic processes with pyloric stenosis, malignant forms of swelling. There were 41 cases of pyloric resection (7 male and 34 females, with ages of from 26 to 58 years). The operations lasted from $1\frac{1}{4}$ to $3\frac{1}{2}$ hours, with removal of 4 to 21 centimetres of the intestine. The cause of operation was: In 28 cases carcinoma; in one case sarcoma; in 12 cases callous cicatrices. Results; 19 cases recovered, 22 died. Of 27 typical pyloric resections, 12 were favorable and 15 fatal. Of the 13 cases of carcinoma that had endured the ordeal of the operation, 5 died after 10 months, and one after $5\frac{1}{4}$ years from recurrence. There were yet living three women of whom two had been operated upon $2\frac{1}{2}$ and $4\frac{1}{2}$ months.

There were six operations on account of scar stenosis, of whom three recovered. One patient died after three months from peritonitis, caused by an abscess in the cicatrix.

There were 28 gastro-enterostomies on account of carcinoma with 14 recoveries. These all died in from one to eight months.

Of 11 resections of the small intestines (7 male and 4 females) all were favorable. (Eight times on account of preternatural anus, once traumatic opening of intestine, and once carcinoma).

Of 24 resections of the cœcum, there were eleven on account of carcinoma (with five recoveries); thirteen on account of fistula after perityphlitis (seven recoveries, five deaths, and one persistent fistula). Of total cases of cœcum resections, eleven deaths, thirteen recoveries.

Of 8 colon resections, four deaths and four recoveries.

Of 7 resections of rectum all recovered, five times with formation of fistula.—*Wiener Med. Wochenschrift.*

MEDICAL.

THE OPENING OF LUNG CAVITIES IN CONNECTION WITH THE
USE OF KOCH'S LYMPH.

Dr. Edmund Leser (*Münchener medicin. Wochen.*) describes two cases in which tubercular cavities in the lungs were drained prior to the use of Koch's liquid. This gave to the increased discharge a suitable outlet. The first case was a woman, aged 40 years, who had had hæmoptysis, fever, loss of appetite, night-sweats, emaciation; she was unable to sit up in bed without help. There was a large cavity in the upper portion of the left lung. Under chloroform-morphia narcosis, an incision, seven centimeters long was made in the first intercostal space, from a finger's breadth inside the processus coratoideus to the edge of the sternum. After division of the skin and pectoralis minor. There was seen to the outer side and partially covered by the pectoralis minor the axillary vein. This muscle was divided transversely and the superior thoracic artery tied.

The axillary vein was thus laid bare and confided to an assistant. To give more room upward, the lower edge of the first rib was slightly chiselled away. The intercostal muscles were then incised. Bleeding was slight and carefully stopped. Next the pleura was incised and found adherent to the lung. The cavity was punctured with a trocar but no fluid obtained. It was then opened for the distance of about four centimeters with a Paquelin's cautery. It was one to one and a half centimeters below the surface. About a tablespoonful and a half of shreddy pus was evacuated and the cavity and wound packed with antiseptic gauze. The patient rapidly improved, and on the thirteenth day, injections of Koch's lymph were begun. The interior of the cavity was twice painted with a one per cent. solution of the same. Improvement was marked, and the cavity has diminished one-half in size. The other case was of a man, aged 42 years, of good physique, with a smaller cavity. On the ninth day injections were commenced, but only three as yet have been given. The

favorable course of these two cases encourages us to continue. It is a *sine qua non* that the pleuræ should be adherent, and, as Sonnenburg has advised, the opening in the lung tissues should be small, as the necrotic changes afterward enlarge it. In conclusion, the use of Koch's lymph is only advisable in cases of tubercular cavities after a means has been provided for the escape of the ensuing abundant discharge.—*Univ. Med. Mag.*

TUBERCULAR PERITONITIS.

Cases of chronic disease of the peritoneum which cannot be traced to malignant disease, are most frequently of tubercular nature. Diagnosis of the tubercular nature of chronic peritoneal affections, is naturally more easy if associated with other tubercular diseases, *e. g.*, of the lungs, uro-genital apparatus, intestines, glands, or bones. When these fail, the local symptoms may aid, such as, in the beginning, slight, and later more severe, ascites, meteorism, etc., also the general symptoms, emaciation, loss of strength, etc.

Tubercular peritonitis can seldom be completely cured by internal treatment alone, although there may be improvement or remission of the symptoms. In the meantime internal treatment should be supplemented, before the strength of the patient is too far exhausted, by surgical methods. Removal of the ascitic fluid by aspiration is not sufficient; on the other hand, incision, with removal of the exudations, is in many cases doubtless of great use, and it is possible in this way to effect a cure. Tuberculosis of the lungs, intestines, or uro-genital apparatus, constitutes an unfavorable condition for complete cure of the peritoneal affection. It cannot be sufficiently emphasized that all cases of chronic peritoneal tuberculosis should be sent to the surgeon at the right time.—*Deutsh. Arch. f. Klin. Med.*

OBSTETRICS.

THE PROPER METHOD OF APPLYING OBSTETRIC FORCEPS.

Dr. Henry D. Fry urges, as the only rational method, the application of the forceps to the sides of the head of the child without reference to its position in the pelvis. He refers to a former paper in which it was stated that fifty-one per cent. of prominent obstetricians followed this rule; while thirty-five per cent. applied the blades in transverse diameter of the mother's pelvis without reference to the position of the head, and eleven per cent. observed no rule and followed either method. He admits that had the great body of the profession been consulted, the majority would be found to apply the forceps according to the German method, and also that in some cases it may be and is impossible to do otherwise. Certainly the difficulties of application are increased when the first method is chosen, and it would be better for a beginner to resort to the second until some facility is acquired. In France it is the practice to apply the forceps to the sides of the head even when transverse at the brim, and the ideal method of extraction is to apply the instruments in such a manner that during traction the foetal head is free to execute all the movements that would occur were the labor normal. To accomplish this it is necessary: (1) To grasp the sides of the head with the blades. (2) To make traction in the axis of the pelvic canal. (3) To secure mobility of the head during its passage, by the use of *Tarnier* forceps. The *Hodge* style of forceps should not be used when their application is made without reference to the child's head, and the *Simpson* style (*Elliot*) should not be used when their application is to be made to the sides of the head. Dr. Fry's conclusions are: (1) Anesthetize the patient and place her in proper position—*buttocks* well over the edge of the bed, and each limb supported by an assistant. (2) Ascertain the position of the head, introducing within the vagina two or three fingers, or if necessary, the whole hand. (3) Apply the blades of a *Hodge* type of forceps to the sides of the head, with

the concave edge directed toward the occiput. If, for any reason this cannot be accomplished, withdraw the instrument and substitute a Simpson (or Elliot), passing the blades to the side of the pelvis. While making traction with this method, watch for anterior rotation of the occiput, and encourage it in some cases by re-applying the blades to better advantage. (4) Make every effort to secure antiseptic condition during the operation. The fingers, hands and forearms of the operator, the external genitalia and vagina of the patient, the instruments and the hands of the assistants, should be clean and aseptic.—*Am. Jour. Obst.*

THE INDUCTION OF ABORTION BY AN ELECTRIC DRY CUP.

Dr. H. W. Freund, in Strasburg, proposed to excite labor pains by closures of the galvanic current through a so-called dry cup on the nipple connected with the negative pole, and a flat electrode positive pole, on the abdomen over the fundus uteri. Dr. A. A. Aman, Jr., experimented with the electricity in this manner, using seven to twenty-six milliamperes. He easily provoked uterine contractions, but was unable to produce premature labor at eight months pregnancy in two cases, as well as in a third case in which the period of pregnancy is not stated. He found the method of some value in delayed labor due to weak contractions of the uterus.—*New Eng. Med. Monthly.*

TEN CASES OF TUBAL PREGNANCY AND THEIR PATHOLOGY.

Orthmann (*Zeitschrift für Geburtshülfe*), has made a careful examination of the specimens in ten cases of tubal pregnancy upon whom he performed laparotomy. These patients ranged in age from twenty-six to forty-four years. The greater number were multiparæ, and, as a rule, more than a year had elapsed since the previous pregnancy. The presence or absence of menstruation differed greatly in the different cases. As a rule, it was absent, but hemorrhage at the time when menstruation should have occurred was not infrequent. In five of the cases the pregnancy was in the right, and five in the left tube. The duration of the pregnancy did not exceed two months. Two of the patients perished, one from hemorrhage, one from ileus.

Regarding the pathology of the cases, Orthmann feels justified in concluding that a firm organized blood-clot found within a Fal-

lopian tube renders the diagnosis of tubal pregnancy extremely probable. An intra-peritoneal hæmatocele occurring with a tubal pregnancy results either from rupture of the sac of the ovum, or through an abortion of the ovum which had lodged at the abdominal extremity of the tube. The recognition of decidual cells is not a positive proof of a tubal pregnancy. Villi of the chorion can be distinguished in all cases of tubal pregnancy during the early months.—*Am. Jour. of the Medical Sciences.*

ON THE METHOD BY ONE FOOT.

Nagel (Arch. f. Gyn.) When podalic version was revived some two hundred years ago it was the teaching to turn both feet. To-day it is the practice of most authorities to turn by a single foot. As to the choice of foot, seizure of the remote foot is practised by most authorities in dorso-posterior positions. Barnes, Simpson and others prefer the remote foot in all cases. While extraction is possible by either the author gives preference to the remote foot for greater facility of rotation. In all the cases observed by the writer the forward rotation of the child's back when left left to nature took place through the longer arc—passing the promontory—never by the shorter route to the side of the pelvis on which the back lies after rotation is complete. This should serve as a guide to the management of cases in turning.—*Brooklyn Med. Jour.*

Editorials, Reviews, Etc.

PUBLISHER'S NOTICE.—The JOURNAL is published in monthly numbers of *Forty-eight pages*, at one dollar a year, to be always paid in advance.

All bills for advertisements to be paid quarterly, after the first insertion of the quarter.

Business communications, remittances by mail, either by money-order, draft, or registered letter, should be sent to the Editor, C. S. BRIGGS, M. D., Cor. Summer and Union Streets, Nashville, Tenn.

All communications for the JOURNAL, books for review, exchanges, etc., should be addressed to the Editor.

THE INTER-CONTINENTAL AMERICAN MEDICAL CONGRESS.

The efforts of a number of distinguished gentlemen to establish an American Medical Congress at the recent meeting of the American Medical Association promises to meet with success, judging from the tangible form it assumed upon that occasion. Resolutions were passed instructing the appointment of one member from each State and Territory to constitute a committee for the purpose of effecting a permanent organization of the Intercontinental Medical Congress, and to fix the time and place of meeting. The following gentlemen were appointed on this committee:

ALA.—W. H. Sanders, M.D. FLA.—C. R. Oglesby, M.D.
 ARIZ.—Henry A. Hughes, M.D. GA.—J. McFadden Gaston, M.D.
 ARK.—Ed. Bentley, M.D. IDAHO—Geo. P. Haley, M.D.
 CAL.—W. R. Clunes, M.D. ILL.—N. S. Davis, M.D.
 COLO.—W. A. Campbell, M.D. IND.—A. M. Owen, M.D.
 CONN.—C. A. Lindsey, M.D. IOWA—B. H. Ciley, M.D.
 DEL.—C. H. Richards, M.D. KAN.—J. E. Minney, M.D.
 D. C.—D. W. Prentiss, M.D. KY.—J. N. McCormack, M.D.

LA.—Stanford E. Challie, M.D. OREGON—Wm. Boys, M.D.
 ME.—Hampton E. Hill, M.D. PA.—Wm. Pepper, M.D.
 MD.—Geo. H. Rohe, M.D. R. I.—Geo. L. Collins, M.D.
 MASS.—Aug. P. Clarke, M.D. S. C.—R. A. Kinloch, M.D.
 MICH.—C. Henri Leonard, M.D. S. D.—J. W. Freeman, M.D.
 MINN.—P. H. Millard, M.D. TENN.—J. R. Buist, M.D.
 MISS.—W. F. Kendall, M.D. TEX.—J. W. Carhart, M.D.
 MO.—I. N. Love, M.D. UTAH—F. S. Bascomb, M.D.
 MONT.—T. J. McMurray, M.D. VT.—H. H. Holton, M.D.
 NEB.—R. C. Moore, M.D. VA.—J. S. Wellford, M.D.
 NEV.—P. J. Aiken, M.D. WASH.—J. M. Morgan, M.D.
 N. H.—Irving A. Watson, M.D. W. VA.—J. H. Brownfield, M.D.
 N. J.—E. J. Marsh, M.D. WIS.—J. T. Reeve, M.D.
 N. MEX.—C. E. Winslow, M.D. WYO.—J. H. Finfrock, M.D.
 N. Y.—Jno. Cronyn, M.D. U. S. A.—.....
 N. C.—H. L. Taylor, M.D. U. S. N.—A. L. Gihon, M.D.
 N. D.—E. M. Darrow, M.D. U. S. M. H. S.—J. B. Hamil-
 OHIO—Chas. A. L. Reed, M.D. [ton, M.D.]

WM. T. BRIGGS, M.D., President.

WM. B. ATKINSON, M.D., Permanent Secretary.

The officers elected by this committee at its first meeting are:

Charles A. L. Reed, M.D., Cincinnati, O., Chairman.

J. W. Carhart, M.D., Lampasso, Texas, Secretary.

I. N. Love, M.D., St. Louis, Mo., Treasurer.

The officers were appointed a committee to draft a constitution, and report at a meeting of the general committee to be held at St. Louis, Mo., Oct. 14, 1891, when other matters relating to permanent organization will be settled.

We wish this laudable enterprise the fullest success. Such an organization will rank second in importance only to the National Association.

DR. SAM. S. BRIGGS, now in Europe for a few months' tour, promises a number of letters for the JOURNAL while absent that will prove of interest to our readers.

THE AMERICAN SOCIETY OF MICROSCOPISTS.

This Association, now in the 13th year of its existence, will hold its 14th annual meeting in Washington, D. C., August 10th, and continue in session five days. Its roll of active members contains about three hundred and fifty names, embracing very nearly every person in the United States who is at all prominent as a microscopist. Its membership consists of two distinct classes, viz., professional men and students of the natural sciences, who use the microscope in their daily avocations as an instrument of research, diagnosis, or precision; and amateurs, or those who find pleasure and profit in the revelations of the instrument. Many of the latter class, from having early chosen special lines of study and investigation, have acquired high reputations in their respective departments of microscopical research. In its earlier years this class predominated in the membership of the society, but at present the professional element is largely in excess.

The qualifications for membership are very simple. The applicant must be a respectable person socially, and interested in the use of the microscope.

We invite and urge upon all persons, professional or amateur, interested in microscopy and not already on the rolls, to send in their applications for membership to the Secretary, Dr. W. H. Seamen, No. 1427 Eleventh street, Washington, D. C. The application should be accompanied by \$3, which is the initiation fee and one year's dues. As it is more than probable that the initiation fee will be increased in the near future, it will be to the advantage of all who contemplate membership to send in their applications before the next meeting.

Any further information concerning the Society or the approaching meeting may be obtained on addressing any of the undersigned.

Frank L. James, President, box 568, St. Louis.

W. H. Seaman, Sec'y, 1424 Eleventh st., Washington, D.C.

C. C. Mellor, Treasurer, No. 77 Fifth Avenue, Pittsburg, Pa.

THE JOURNAL.

The list of our subscribers is steadily growing, we are pleased to say. Every mail brings in a number of new subscribers, and we hope that before a very great while it can be truthfully said that the circulation of the JOURNAL is the largest of any in the South. Our friends can do much toward helping to increase the circulation by speaking a good word for us when the opportunity presents. Any and all efforts to assist us in our work will be duly appreciated. We have started out to place the JOURNAL on its *ante-bellum* footing of substantial prosperity and we mean to succeed. A number of sample copies, with enclosed subscription blanks will be sent out with this edition. We hope every physician will fill out the order blank and send it to us with enclosed amount, one dollar, for one year's subscription.

We would like to remind the few who are still in arrears, of their indebtedness, and beg them to remit without delay.

THE 17th Annual Report of the Cincinnati Sanitarium, whose advertisement appears regularly in our JOURNAL, has been received. The continued prosperity of this well-known institution is of itself the best test of its worth. It enjoys a reputation throughout the South and West second to none as a home for the victims of mental diseases, opium habit, and inebriety.

We acknowledge the receipt of the Announcement of the Meharry Medical School, the medical college for colored people, of this city. It is a creditable and elaborately prepared catalogue, containing a picture of its Dean, Dr. Hubbard, and a number of illustrations of the college building. The college shows a yearly increasing attendance.

JUNE 18th, a class of one hundred and fifty-five graduated from the Kentucky School of Medicine, at Louisville, Ky.

THE announcement of the appointment of Professors Bartholow and DaCosta, lately resigned from the Jefferson Medical College, to Emeritus Professorships in that institution will be received with great pleasure by the numberless admirers of these distinguished gentlemen.

A SERIOUS loss to the profession is the death, recently, of Dr. Fordyce Barker, of New York City, of apoplexy. He has for many years stood at the head of the medical profession in New York, and was well known at home and abroad as a specialist and author.

HEREAFTER, unless especially requested by the subscribers, receipts of subscription money will not be mailed, but the JOURNAL will publish monthly lists of names of senders.

IMPORTANT RESOLUTIONS OF STATE BOARD OF HEALTH OF KENTUCKY.—*To the Editor:* I am instructed by this Board to transmit to you for publication the following self-explanatory resolution which was adopted at its recent meeting held in Louisville:

Resolved that the Secretary be instructed to place upon the list of medical colleges those whose diplomas are to be certified and endorsed for registration under the laws of this State, only such colleges as shall, after the session of 1891-2, exact of matriculates and graduates a minimum of requirements not less than those required by the American Medical College Association.

Very respectfully, J. N. McCORMACK, Sec'y.

NOTICE.—Through an oversight upon my part the name of Dr. S. S. McCrum, of Emory, Texas, was omitted from the list of graduates of the University of Nashville and Vanderbilt University as published in the Announcement of 1891-2. This omission is calculated to do a worthy gentleman and accomplished physician great injustice, hence this card.

W. L. NICHOL, M.D.,
Registrar U. of N. and V. U.

BOOK NOTICES.

SURGERY—A PRACTICAL TREATISE WITH SPECIAL REFERENCE TO TREATMENT. By C. W. MANSELL, A.M., M.D. Oxon. Fellow to the Royal College of Surgeons; Surgeon and Lecturer on Physiology to the London Hospital; Formerly Radcliffe Traveling Fellow and Fellow of Pembroke College, Oxford, England. Assisted by various writers on Special Subjects; with Five Hundred Illustrations, two hundred of which have been made for this work from special drawings. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut street. 1891.

A new claimant for professional favor is presented in this large and comprehensive work. The author has succeeded in incorporating in this single volume all the most recent advances in surgery. It is thoroughly practical. It is well arranged and classified. While the book presents many excellent features, and will be a valuable addition to the surgeon's library, it is not the text book—that is, a thorough exponent as we conceive a work of the kind should be—of modern surgery. Our limited space forbids our giving the reason for this opinion. There can be no question, however, that in many particulars, it will prove a useful book.

SURGICAL BACTERIOLOGY BY N. SENN, M.D., PH.D., Professor of Surgery in Rush Medical College, Chicago, and in the Chicago Polyclinic; Attending Surgeon to the Milwaukee Hospital, Consulting Surgeon to the Milwaukee County Hospital and to the Milwaukee County Insane Asylum; Honorary Fellow College of Physicians of Philadelphia; Permanent Member of the German Congress of Surgeons; Corresponding Member Harveian Society, London; Honorary Member of La Academia de la Medicina de Mexico, of the D. Hayes Agnew Surgical Society of Philadelphia, of the Ohio State Medical Society, and of the Minnesota State Medical Society; Member of the American Surgical Association, of the American Medical Association, of the British Medical Association, of the Wisconsin State Medical Society, and of the Brainard Medical Society, etc. Second Edition thoroughly revised. Philadelphia, Lea Brothers & Co. 1891.

In an incredibly short time after the publication of the first volume of this timely work the second edition now appears, attesting in the most forcible manner the popularity of the work. Prof. Senn is one of the foremost workers in the field of bacteriological pathology, and this classical work will be accepted as author.

ity upon this important subject. The physician who in these times neglects to familiarize himself with all the most recent discoveries concerning bacteria and the part they play in the world of disease is decidedly behind the times. This treatise is especially designed to serve as a guide in the study of micro-organisms. It is carefully arranged, clearly and concisely written, and in every way well suited to serve as a guide. Prof. Senn deserves the thanks of the entire profession for the preparation of this valuable work.

THE POCKET MATERIA MEDICA AND THERAPEUTICS. A resume of the action and doses of all officinal and non-officinal drugs now in common use. BY C. HENRI LEONARD, A.M., M.D., Professor of the Medical and Surgical Diseases of Women and Clinical Gynecology, Detroit College of Medicine; Member of the American Medical Association, of the Michigan State Medical Society; the Wayne County Medical Society, Detroit Gynecological Society, Etc. 1891. The Illustrated Medical Journal Co., Detroit, Mich.

This book will appeal to the tastes of those practitioners who are fond of consulting epitomized vade-mecums. It possesses many points of excellence, especially in the matter of arrangement. It is particularly well suited to the needs of the student, crowded as he is with much more work than he can hope to accomplish.

PRACTICAL NOTES ON URINARY ANALYSIS BY WILLIAM B. CANFIELD, A.M. M.D., Chief of Chest Clinic, and Lecturer on Clinical Medicine, University of Maryland; Visiting Physician to the Union Protestant Infirmary, Bay View Hospital, Baltimore, etc. 1891. GEORGE S. DAVIS, Detroit, Mich.

Urinary Analysis is such an important part of the physician's daily work that any systematized and well arranged manual making the various processes clear, should be welcome. This little work seems excellently well adapted to the needs of the practitioner.

?Quiz-Compends? No. 7. A Compend of GYNÆCOLOGY. By HENRY MORRIS, M.D., Late Demonstrator of Obstetrics and Diseases of Women and Children, in the Jefferson Medical College, Philadelphia, etc. With 45 Illustrations. Philadelphia. P. BLAKISTON, SON & Co., 1012 Walnut st. 1891.

The value of Quiz-Compends as aids to students is undoubted. This is an exceptionally valuable number of the series. It contains in a condensed form much that will subserve the interest of the general practitioner.

PUBLISHER'S DEPARTMENT.

We take great pleasure in asking the attention of our readers to our advertising department. It will be noticed that a number of advertisements make their appearance in this number, local as well as foreign.

We trust that every reader will with every number consult our advertising department and when anything is needed give our advertisers the preference and mention THE JOURNAL.

John H. McIntyre, A.M., M.D., of St. Louis, in a splendid paper on "Some Practical Points in Abdominal Surgery," concludes with the following remarks on the after management of such cases:

When pain is present, I use but little Morphia, on account of its tendency to arrest secretions; and thereby prevent the elimination of morbid material, but in its stead, for more than a year past, have used Antikamnia, with happy effect. It soothes and tranquilizes, and lessens the tendency to rise of temperature.

THE SHURLY-GIBBS' FORMULA FOR PULMONARY CONSUMPTION.—There are numerous formulæ which investigators, inspired by Koch's discoveries, have recently tested the virtue in pulmonary consumption.

Among these it may now be judiciously claimed that the utility of several, which at first proved promising, has failed to be demonstrated by experiment

The following should be regarded as still *sub judice*: Koch's Tuberculine, Liebreich's Cantharidinate of Potash, the transfusion of the arterial blood of the goat into the veins of the tuberculous patient as suggested by Dr. Berheim, the injection of the serum of dog's blood as suggested by MM. Hericourt and Richet, the sub-cutaneous administration of gold and maganese commended by Prof. J. B. White, Dr. Rousel's treatment by the injection of aromatic vegetable essences or perfumes. These have been tried, and the verdict at present is that they have been found wanting in the anticipated specific therapeutic effect.

The most promising method is now considered to be the injection of

chemically pure iodine and chloride of gold and sodium, in connection with the inhalation of chlorine gas, as commended by Dr. E. L. Shurly, Professor of Clinical Medicine and Laryngology, Detroit College of Medicine, and Dr. Heneage Gibbs, Professor of Pathology, University of Michigan.

It is vitally essential to the proper employment of these agents that the necessary solutions should be absolutely pure and of uniform quality.

Messrs. Parke, Davis & Co. announce that, at the request of Dr. Shurly, they have prepared solutions of chemically pure iodine and chloride of gold and sodium, which are put up in one ounce bottles, and will furnish physicians with clinical reports embracing the method of using these remedies.

Poland water is not only a great remedy but a delightful beverage during the summer months. Walsh & Hayes keep it fresh from the spring, at all seasons, see their advertisement in this number.

Joseph P. Ross, A.M., M.D., Professor Clinical Medicine and Diseases of the Chest, Rush Medical College, Chicago, Ills., says: For the past three years I have prescribed Bromidia very frequently, and have never yet been disappointed in securing the results required. In cases when there is insomnia without pain, in the delirious stages of acute fevers, in delirium tremens, puerperal mania, in short, in all those cases requiring soporifics, I find Bromidia invaluable. I consider Bromidia an excellent combination.

Dr. Landon B. Edwards, in "Virginia Medical Monthly," Nov. 1890.

"The Bowden Lithia Springs are the most remarkable mineral springs in the world, because of the large amounts of Bromine and Lithia held in solution. No spring water in America rivals it where the constitutional effect of the Bromides is sought."

Messrs Reed & Carnrick have rebuilt their laboratory, and are now better prepared than before their big fire to furnish the excellent specialties which bear their name. In this connection we invite special attention to their new advertisement. They are known everywhere, and their name is a synonym for fair dealing and scientific pharmacy.

Pepsin is undoubtedly one of the most valuable digestive agents of our *Materia Medica*, provided a good article is used. Robinson's Lime Juice and Pepsin (See advertisement this number) we can recommend as such.

The fact that the Manufacturers of this palatable preparation use the purest and best pepsin on the American market, and that every lot made by them is carefully tested, before offering for sale, is a guarantee to the physician that he will certainly obtain the good results he expects from pepsin.

NASHVILLE JOURNAL

—OF—

MEDICINE AND SURGERY.

C. S. BRIGGS, M.D., EDITOR.

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NUMBER 2.

Original Communications.

A CASE OF POISONING FROM ACONITE.

BY S. D. THACH, M.D., DECHERD, TENN.

A few days ago I wrote the following prescription for Mr. E.:

R—Tinct. Aconite, Rad..... ʒss.

Sig.—One drop in teaspoonful of water every hour until fever declines.

The prescription was taken to one of the local druggists and properly filled, with directions carefully written on bottle.

Having occasion to call at the same house a short time subsequently, I was requested to see the patient.

His temperature had declined from 104° to 99°. Pulse was very slow and weak, and respiration eight per minute. Pupil alternately contracting and dilating.

Immediately realizing that an overdose of the aconite had been

administered, I at ounce gave zinc sulph. zij , securing prompt emesis within two minutes. The patient was then warmly wrapped, and alcohol and wine given in large doses every five minutes. Spirit ammonia ʒi , well diluted, was given at intervals of three minutes. In the beginning large doses of atropine were given with intention of speedily paralyzing the inhibitory apparatus of the heart. Respiration continued to decline until at the end of an hour it was scarcely five per minute, with pulse just perceptible.

After persevering in the same treatment, with exception of atropine, for another hour, respiratory action was increased much fuller and more frequent.

At the expiration of three hours from ingestion of poison, both pulse and respiration were about normal, and on next day patient was up and as well as usual. On questioning the nurse as to the amount that had been administered, I received the reply: "I gave him a teaspoonful of the medicine, but as he vomited most of it, I repeated the dose."

A CASE OF PUERPERAL SEPTICÆMIA.

BY DR. A. W. BOYD, CHATTANOOGA, TENN.

At a meeting of the Chattanooga Medical Society, Friday evening, June 18th, Dr. A. W. Boyd reported a very interesting case of puerperal septicæmia. The history was about as follows: About six months before her parturition she began vomiting. This kept up for three months, then she had a diarrhœa, which lasted till her confinement. About two months before her confinement she had a sore mouth, etc., indicating intestinal derangement. This lasted a month, but the diarrhœa continued. She had no febrile temperature before confinement.

The labor was a short one, he being at the house about three hours. The child was unhealthy and died on third day. The second day after confinement she had a rigor, and the temperature ran up to 105°. He used carbolic injection and for three days there was no chill. Then there was another rigor with a temperature of 105°, and great prostration. He then irrigated every three hours. She had no chill for two days, when she had another. Objections being made to the irrigation, he quit it for a few days; but, as she had a rigor about every four hours, he insisted on washing out the uterus. Examination by speculum at this time disclosed a membrane entirely covering the walls of the uterus and vagina, which was very tough and resisting. Had to use a sharp curette to remove it, after which he washed out every three or four hours. The patient seemed to improve, but on third day she had another chill. Examination disclosed a renewal of the membrane, which was again scraped off. However, notwithstanding the irrigation the chills continued, and two days after

the last removal he took off the membrane again. Two days later she died.

The womb had not contracted after confinement, and the first washing brought away a good deal of blood and clot. The pulse varied between 120 and 140, the temperature between 101° and 105°. She was in a profuse perspiration almost all the time. There was no tenderness over abdomen, and but little tympanites. The discharge from both bowels and uterus were exceedingly offensive. He believes there was a septic condition before confinement. The membrane resembled diphtheritic membrane, and its removal left bleeding points. He removed it—in answer to a question—so as to allow the injections to reach the diseased surface. There was no throat trouble; some little vomiting after parturition. He has been with no septic patient for months. Had not examined urine. Her previous health before the vomiting set in was good. He had been with her in labors which were natural. He relied chiefly on local treatment, carbolic and bichloride injections; had used the latter as strong as 1 to 2,000.

In the discussion which followed a few thought it was true diphtheria of uterus, but the majority thought not, there being no history of contagion.

Proceedings of Societies.

GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE.—MAY MEETING.

REPORTED BY WILLIAM S. GARDNER, M.D., SECRETARY.

The President, Dr. Henry M. Wilson, in the chair.

Dr. Brinton read a paper entitled, "A Day's Work in Obstetrics." Under this title he related the following cases:

1. A case of podalic version.
2. A case of normal labor.
3. A case of shoulder presentation.

Efforts at version unsuccessful—vagina ruptured—the woman dying undelivered.

4. A case of placenta previa lateralis treated by internal podalic version; mother and child saved.

Dr. Miltenberger: There is some discussion in regard to the preference for high forceps and version, I prefer version, but the profession is divided and the choice comes to a matter of skill and individual practice.

Dr. Neale: One of the points claimed for version over high forceps is that in version the narrower diameter of the head comes first. It has been claimed that the same condition is brought about in the use of the forceps by the diminution of the diameter of the crown, so that they are less than those of the base of the skull. I cannot see how this is, for certainly the forceps do not as a rule compress sufficiently to reduce the diameters of the crown to less than those of the base of the head.

Repeated attempts at version have often given bad results when the uterus is contracted and retracted. When there is a neglected cross birth and the child is dead, after a moderate attempt at version has failed, decapitation should be done.

By means of Braun's hook it is certainly a comparatively easy and safe procedure.

I have no criticisms to make upon the treatment Dr. Brinton adopted in his cases.

Dr. Brinton: Since this case of rupture of the vagina has been reported, it has been stated by a pathologist of this city that it is the only one on record. I would like to ask if any of the gentlemen present know of any such cases?

Dr. Miltenberger: There are certainly on record many cases of rupture of the vagina. I have seen at least two such cases.

Dr. Thos. A. Ashby: I once passed a sound through the uterus. The sound went in easily and could be felt just below the umbilicus. Before this the patient had had pus running slowly from the uterus which had evidently had its origin higher up. There were no bad symptoms. The woman rode home, a distance of eight miles, and was not heard from.

I once attempted to remove an epithelial growth from the vagina, and all at once the intestines came down. I cleaned away the diseased tissue, closed up the opening with stitches and the wound healed promptly. The patient lived eleven months.

Dr. Geo. W. Miltenberger read a paper upon "Superfœtation and Superfecundation."

Dr. P. C. Williams: I had a case recently of ovulation during lactation. A lady came to me, who had continued to nurse her child and is now five months pregnant. These cases show that there may be ovulation without menstruation, and lead me to agree with Dr. Miltenberger.

Dr. Ashby: I have had cases similar to Dr. Williams. I have been surprised at the frequency with which menstruation returned after apparent removal of both ovaries and tubes. One of the first cases upon which I operated was one of hystero-epilepsy. I thought I had removed all the ovarian tissue, but found subsequently that I had not. She began menstruation about eight months after the operation, and afterwards suffered metrorrhagia. Three years later I examined her under chloroform and found a

small tumor. I operated and removed a small portion of an ovary. She recovered promptly and has not menstruated. Her health is good and there has been no return of the hystero-epilepsy. I have had other cases in which some parts of the ovaries had been left behind. These women continued to menstruate. In those cases where I have succeeded in removing the ovaries entirely I have not observed the return of menstruation.

Dr. B. B. Browne: I attended a woman a few years ago who had had seven children and had never menstruated. She was married before menstruation began, and had had children very frequently. I think superfœtation does occur. It certainly occurs in uterus septus.

The removal of the ovaries has little to do with the cessation of menstruation, but the tubes have much to do with it, and it is when a portion of the tube remains behind that menstruation continues. Metrorrhagia will occur when the tube is closed at the outer extremity. When a part of the ovary is left, of course a part of the tube is left also.

Dr. W. E. Mosely: My experience has been such as to make me believe that menstruation does not depend upon the presence of the Fallopian tube, nor is it independent of the ovaries. Eighteen months ago I opened a lady's abdomen for a very severe case of chronic pelvic peritonitis with double pyosalpinx. Both tubes were tied close to the uterus and secured, but after diligent search no trace of either ovary could be found. Dr. W. H. Welch, to whom the specimens were shown, expressed the opinion that they had probably been destroyed in the inflammatory process. The patient made a good recovery after very prolonged drainage, made necessary by the sloughy condition of the pelvic contents and the fecal fistula, which persisted for several weeks. This patient for months has been menstruating regularly and freely every three weeks. In all probability some portion of ovarian tissue escaped destruction.

In another case in which I took special pains to remove every particle of each ovary and both tubes, on account of severe hemorrhage, the patient has not had a show during the past twelve months.

Dr. Ashby: Mr. Tait has maintained the position of Dr. Browne for several years.

In one case the patient had been suffering from hemorrhage of tubal origin. I removed both tubes and one ovary. The other ovary having undergone cystic degeneration it was impossible to remove all the ovarian tissue. This patient has been cured of her menorrhagia.

Or. Opie: It seems quite well established by *post-mortem* results that all cases of menstruation following oophorectomy are not due to failure on the part of the surgeons to completely remove the ovaries.

The utero-ovarian ligament, however, is sometimes very short, and the button-like section beyond the ligature, which in such cases contains ovarian stroma, may keep up a dominating influence; again, the anatomical shape of the ovary gradually sloping off into the ligament causes a part of the ovarian tissue to be left on the sterile side of the ligature in spite of the utmost care of the operator.

The rule after child-birth seems to be that menstruation is in abeyance for a variable number of months, but cases have doubtless occurred, in the experience of most obstetricians, when it has been uninterrupted during lactation. I have met with a number of cases where women have conceived during lactation when there was no accompanying month's flow. Mr. Tait thinks that during and even after the menopause, ovulation goes on though the mucous membrane is disqualified for securing a fecundated ovule. Ovulation may be going on during lactation, but the mucous lining of the uterus may not be well qualified for menstruation or fecundation.

Dr. Bush, of New York, who has a dairy-farm, has been performing some interesting experiments to find out the mode of securing the best quality of milk. He has determined that the heifer, after the removal of the ovaries, can be made a perpetual milker, and that the milk is of better quality than in cows subject to ovulation and impregnation.

Dr. Brinton: With reference to menstruation, after the statement that one or two per cent. of women have supernumerary ovaries, and possibly the return of the menstruation is due to the presence of the third ovary.

Dr. Miltenberger: Dr. Browne laid much stress upon the fact that menstruation continued when obstructed tubes were present.

Menstruation has nothing to do with the passage of the ovule along the tubes, but is due to the maturation of the ovule. Therefore, the tube may be obstructed as much as you please and there will be no results. Battey and Engleman have reported a number of cases of pregnancy after the ovaries were apparently removed by skillful operators. In other cases the ovaries, supposed to be removed, have been found *post-mortem*.

Dr. Browne: In most cases where the ovary and tubes are removed the lining of the tube is extracted by the ligation.

Dr. Ashby exhibited a specimen of a ruptured tubal pregnancy which he had removed from a patient, seen in consultation with Dr. Arthur Williams, of Elk Ridge, Md. The patient was 34 years of age, and gave birth to one child ten years ago. She conceived in February of this year, and about the eighth week of gestation was seized with violent symptoms of intra pelvic hæmotel. Dr. Williams was called in and after examination diagnosed the condition as a ruptured tubal pregnancy. I saw the patient with him the following day, and, upon examination, confirmed the diagnosis. The patient rallied from the shock of the first rupture, and one week later a second rupture took place, though not followed with such violent and dangerous symptoms as in the first instance. The surroundings of the patient were so unfavorable that she was removed from her home, in Anne Arundle county to the Md. General Hospital, where the laparotomy was performed. Upon opening the abdomen her pelvis was filled with bloody serum, blood clots, and evidences of general peritonitis. The ovary was in such condition that it was found necessary to remove about three-fourths of the tissue.

The patient was critically ill from the 3rd to the 5th day from symptoms of intestinal obstruction. Her bowels were moved by administering one grain doses of calomel every hour for 12 hours, every other method having failed. The patient has made a successful recovery.

This is the third case of tubal pregnancy I have removed by laparotomy within the last two years, all of them having recovered.

Selected Articles.

THE CAVENDISH LECTURE ON ELIMINATION AND ITS USES IN PREVENTING AND CURING DISEASE.

Delivered before the West London Medico-Chirurgical Society.

BY T. LAUDER BRUNTON, M. D., D.SC. EDIN., LL.D. (HON.) ABERD.,
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It seems to me that one of the most marvellous definitions ever given is that of dirt is "matter in the wrong place." The matter need not be in itself objectionable. It may be, on the contrary, exceedingly valuable and useful, provided it be in its proper place and fulfilling its proper function, and yet it becomes dirt at once when put in the wrong place. The pipeclay which is used to keep the soldier's belt clean becomes dirt when it gets upon his uniform, and the blacking which lends lustre to our boots and is used to keep them clean, as it is termed, at once assumes the character of dirt, and exceedingly objectionable dirt, if we put up those boots on a chintz-covered sofa, leaving a black smudge on the fair surface of the fabric.

The utility of things which most people would agree to call dirt is shown by the care employed in sifting cinders, and in separating raps and cones from the contents of our dustbins. But the dust contained in these bins is a most unmitigated nuisance to the unfortunate householder who cannot get it removed. I do not

know any topic more calculated to excite a lively conversation amongst householders in London, at any rate, than that of dust-bins and drains. The mere mention of either of these words has an effect quite different from that of the "apple of discord," for its effect is a most wondrous concord, every one having the same tale to tell of the neglect of the dustmen and the iniquities of plumbers.

The dustbins are the receptacles for the solid refuse of our houses—the dust, the ashes, the cinders, the odds and ends of dry material—which accumulating in our rooms would render them dirty and disagreeable; but the drain pipes are the channel by which the soluble and liquid refuse of our houses is carried away, and any interference with them is still more serious than the non-removal of our dust.

It is only in highly complex communities that the difficulty of removing refuse, either solid or liquid, is felt to an extreme degree. A single individual traveling all by himself in the country has no difficulty whatever. In villages the difficulties are slight, and even in large camps they may be overcome in a very simple manner, as is shown by that hygienic law of Moses: "Thou shalt have a paddle upon thy weapon; and it shall be when thou wilt ease thyself abroad thou shalt dig therewith and shall turn back and cover that which cometh from thee."* But in cities like London, Paris, Berlin, or Vienna, the difficulty of eliminating the refuse is very great, and enormous expenditure is required to effect it. Each unit in the population contributes to the total amount, and as the population grows, the difficulty increases.

But in large towns the whole refuse of a house does not at once find its way into the dust-bin or the sink. The worn-out furniture, the cast-off clothes and disused utensils which are lumber and rubbish in the houses of the rich, find their way as useful articles into those of the poor, and after a further period of service, descend still lower in the scale of society, passing perhaps through many grades before they are thrown away as absolutely worthless. Even after their fragments have found their way into the dust heap they are again picked up by scavengers, conveyed to mills

*Deuteronomy, xxiii, 13.

or factories and, after being there transformed into a different shape, are again employed for other purposes.

Now there is a wondrous unity in life and living beings, and the same process which we find going on in towns and villages occurs also in the living beings which compose their population. Nay more, it exists in the tissues and cells of which these living bodies are composed, and even in the unicellular organisms which constitute the simplest forms of life on the surface of this globe. These unicellular organisms are now attracting much attention, for they are the earth's scavengers who tear up the old clothes, crush up the old bones and burn off the ashes of the world which would otherwise accumulate and render life impossible. But these lowly organisms are not content with breaking up dead matter; they magnify their office and, by attacking living beings, they produce diseases which may lead to death, dissolution, and ultimately to the complete disappearance of the man or beast they attack. Such unicellular organisms, as a rule, have no difficulty in getting rid of the products of waste which are formed by them as well as well as by the higher animals. As a rule they live and grow in some fluid, and their own movement through the fluid brings them in contact with fresh layers of it from which they obtain new nutriment and which also washes away their refuse. Should this refuse accumulate to too great an extent, as it does when the fluid is too crowded by the presence of an enormous number of microbes, the refuse products will kill these microbes, just as the unfortunate persons confined in the Black Hole of Calcutta were suffocated by the products of their own respiration.

But just as the broken victuals and old clothes of the rich, regarded by them as simple rubbish, can be utilized by their poorer neighbors, so the fluid in which one class of microbes can no longer grow forms a most suitable soil for others. Thus the liquid in which yeast can no longer grow forms a most suitable soil for the acetic bacillus, and when this in turn has ceased to grow, its place is taken by putrefactive bacilli, and these in their turn are succeeded by moulds.

When unicellular organisms become agglomerated together as in sponges, the difficulty which each organism has in getting rid of its waste material and in obtaining new nutriment is increased, and those cells which are unfavorably placed would probably die

very quickly, either from lack of nutriment or from suffocation by their own waste, were it not this untoward issue is provided against by a peculiar arrangement. Some of the cells become furnished with cilia, which keep up a constant current of water through the interstices of the sponge, and thus bring the fixed cells into a similar favorable condition as their free swimming congeners, with this difference: that, in the case of the free swimming cell, it moves through the fluid in which it lives, while in case of the fixed cell the fluid flows over it.

This latter arrangement is the one which exists in most of the cells of the higher organisms such as man. Although some cells, like the leucocytes of the blood, swim freely through the fluid which nourishes them, all the fixed cells of which the tissues are formed are nourished by the lymph which flows around or between them. A constant current is kept up in this lymph by the mere pressure due to exudation from the capillaries on the one hand, and to the absorption by the veins and lymphatics on the other, aided by pressure on the tissues caused by movements. Only in one place, the central canal of the spinal cord, where the delicacy of the tissues requires a constant flow of nutrient fluid, and yet demands an absence of pressure which might injure the nervous structures, is the current of lymph kept up by ciliary motion, as it is in sponges.

As Claude well puts it, the cells of which our bodies are composed do not live in the air. They live in a liquid internal medium, which at the same time supplies nutriment and oxygen and removes waste products. So long as this nutritive medium continues to fulfil its functions, the cells of which our bodies are composed live and grow with perfect indifference to our external surroundings; and so long as a man holds his breath, so that the fluid medium is unaltered, it is a matter of indifference whether he has his head in a bag of oxygen or in a brewer's vat filled with carbolic acid.

But the fluid medium or lymph very quickly becomes altered by the living cells, which drain it of its oxygen and pour into it their waste products, and in the course of a few minutes it would become quite unable to support their life, were it not gaining supplies from without of oxygen and nutriment, and eliminating or destroying the waste products poured into it. I say destroying,

because when the lymph passes into the blood the waste products appear, to a certain extent at least, to undergo oxidation, just as the sewage of villages high up the Thames becomes oxidized or destroyed before it reaches the mouth of the river or the open sea. But various conditions may tend to interfere more or less with the discharge of the sewage from the cells, as well as with their supply of nutriment and oxygen, and it is with this discharge of sewage or elimination of waste products from the cells which compose our tissues into the blood and its excretion from the body as a whole that we have particularly to do to-day.

It is not merely the elimination of the natural waste products of our tissues that we have to consider, but the elimination of waste products formed within our bodies by disease germs which have entered them. These disease germs, consisting as they do chiefly of bacilli or micrococci, resemble the cells of our bodies in the fact that they also may be destroyed by their own waste products, but when they enter our bodies the substances they produce—harmful though they might be, if in excess, to the bacilli themselves—are usually still more harmful to the cells of the tissues, and so weaken them as to give the microbes a better chance of success in the struggle between them and the organism into which they have entered. Though opinions may differ as to the exact mode in which the organisms destroy intruding microbes, or intruding microbes destroy the organism, there is no doubt about the fact that a struggle does exist between them, and recent experiments which have been made on such a large scale with Koch's tuberculin have shown that this fluid, although sometimes useful and productive of benefit to patients, not infrequently has an opposite action, and appears to assist the development and growth of the tubercle bacilli already present in the lungs or elsewhere. The apparently contradictory results obtained by the use of tuberculin seems to be explained by the observations of Brieger and Fraenkel in regard to diphtheria. These observers have discovered that the diphtheritic bacilli produce two substances, one of which is toxic to an animal, and the other of which is protective. These substances differ in their power of resisting heat, the toxic substance being destroyed at a temperature of 55° C. to 60° C., while the protective resists a temperature not much below the boiling point. These substances appear closely allied, and it is

just possible that one may be transformable into the other. What their relationship to one another is we do not at present know, but if we look at the vegetable kingdom we find that in numerous instances poisons closely allied chemically to one another are present in the same plant, but have an antagonistic action to one another. Thus in calabar bean we have physostigmine and calabarin, of which the latter stimulates and the former depresses the spinal cord; and jaborandi contains two alkaloids, pilocarpine and jaborine, having entirely different actions, and, indeed, jaborine antagonizes the action of pilocarpine. Many alkaloids contained in the same plant seem to have a simple relation to one another; either the one contains the elements of water more or less than the other, or an atom of hydrogen in the one is replaced by a molecule of methyl in the other. Whether some such simple relationship as this exists also in the products of bacteria we do not yet know, but there is little doubt that further researches will soon throw much light on the chemical nature of bacterial poisons. One noticeable point in regard to the resistance of animals to such poisons is that an abundance of glycogen in the liver increases its power to destroy the action of such poisons as pass through it. This power diminishes as the glycogen disappears, and what is true for the liver is probably true for other parts of the body. At any rate, we know that when animals are starved the glycogen disappears both from the liver and the tissues, and starvation greatly increases the liability of an animal to succumb to infection. But, putting aside the question of neutralization of bacterial poisons by the lymph or tissues, it is evident that if the toxic products of any bacillus can be washed out of the organism, that organism will have a better chance, and experience confirms the theoretical view that free elimination, both by the kidneys and the bowels, is useful treatment in infective diseases.

Turning again to the normal products of tissue change, we note that probably the most important parts of a cell are its nitrogenous components or proteids. The chief products of nitrogenous waste are urea and uric acid, and the relative quantity of each varies in different classes of animals. The urea forms the chief product of waste in the amphibia, but in the reptilia and in birds the waste appears almost entirely in the form of uric acid combined with bases. In man we have a mixed condition, as the waste occurs

partly in the form of urea and partly in the form of uric acid, the proportion of acid to that of urea being about 1 to 33. It is usually supposed that there is a greater tendency in some persons to the formation of uric acid than in others, and that this tendency is associated with a gouty or rheumatic diathesis. In a number of exceedingly interesting and valuable papers Dr. Haig has shown that the secretions of uric acid is greatly influenced by the comparative alkalinity or acidity of the blood, and that the amount of acidity* may be made to vary within very considerable limits by the kind of food, by the process of digestion, and by the use of various drugs.

There are certain parts of the body more especially in which the uric acid, wherever it may be generated, has a tendency to get stored up, and this is especially the case in the spleen and the joints, which may be compared to dustbins. Whenever the blood becomes more strongly alkaline than usual it tends, like an active housemaid, to sweep up the uric acid dust out of these bins, with the result of causing great discomfort to the organism generally, for the uric acid, thus sent on its travels, attack the nerve centres and the vessels, producing headache and depression of spirits, so that the gouty people will frequently object to alkalies because, as they say, they are very lowering. Acids, on the contrary, prevent the blood from taking up the uric acid, and lead to its being concentrated in the dustbins already referred to, so that acids relieve the depression, remove the headache, but, at the same time, tend to cause pain in the joints and accumulation of uric acid in the spleen. Here it lies without producing any inconvenience for the time, but it may possibly be stored up to such an extent as to cause great discomfort or even danger when this large dustbin comes to be cleaned out.

A year or two ago I had a very striking case illustrative of Dr. Haig's views. A gentleman who had suffered from chronic malaria had an enormously enlarged spleen. That organ began to contract, and simultaneously the patient began to suffer from repeated attacks of renal colic, due to small uric acid calculi, at intervals of two or three weeks. So frequent were these attacks that I thought he must have had an accumulation of small

*The blood is never acid, but diminished alkalinity may, for the sake of convenience, be spoken of as comparative acidity.

stones in his kidney, for I did not fancy he could form the concretions sufficiently rapidly to cause such frequent recurrence of the renal colic. *Post-mortem* examination, however, showed that I was mistaken, for there was no calculus whatever in either kidney.

Retention of uric acid in the spleen, according to Dr. Haig, is accompanied by its absence from the blood, and consequently by a feeling of well-being and jollity, which may, however, pass into an entirely opposite condition when the uric acid, which has been stored up during this period of retention, again finds its way into the circulation. Thus while a glass or two of champagne, by increasing acidity, drives the uric acid out of the blood, and consequently gives rise to hilarity and happiness in the person who has taken it, it will give a gouty man twinges in his joints, by causing the uric acid to lodge in them, and may cause much subsequent headache and depression when its stimulant effect has passed off and the imprisoned uric acid again enters the circulation.

Even more serious consequences than depression and discomfort may, according to Dr. Haig, be produced by the rapid removal of uric acid from its chief dustbin or storage place—namely, the spleen—into the circulating blood; for, instead of only affecting the mental faculties, it may attack the heart with fatal results. As an instance, he gives the death of the late Canon Liddon, who had recovered from an attack of gout in the head, and was feeling fairly well even after the fatigue of a railway journey, but suddenly fainted after breakfast, and died. Dr. Haig's explanation of this is that, during the period of comparative well-being, the uric acid had been stored up, and when the blood became more alkaline, as it does during digestion, and dissolved a part of it out, the liberated uric acid contracted the arterioles, thus raising the tension so that the heart was unable to overcome it, and causing fatal syncope.

Haig's theory of the storage of uric acid is, I believe, very much the same as that of Sir A. Garrod, namely, that this substance is formed in the kidneys out of waste products derived from the nitrogenous tissues generally or from the liver. Part of it is at once excreted, but part of it may return from the kidneys, and either circulate in the blood or get stored up in the spleen.

If we return to our analogy of the dust in the house, it is as if the ashes, crumbs, and waste vegetables were thrown together into an ash bucket to be emptied, but, if this emptying were imperfectly done, the remnants would be thrown into a dustbin within the house, and could not be cleared out directly to the outside, like the ash bucket, but would require to be emptied by bringing it through the passages of the house, which would lead to much discomfort.

The alkalies constituents in the blood are the natural solvents of uric acid, and anything that increases their proportion in the blood renders the uric acid more soluble, so that it is more readily removed from its place of storage and brought into the general circulation, where it produces manifold discomforts. Thus it is that alkaline remedies in gouty patients are so apt to give rise at once to the complaint of their being lowering, not because they have a depressant action of their own, but because they withdraw the uric acid from its lurking place, and allow it to act upon the nervous system, thus producing depression.

The alkalinity of the blood is increased when the materials of gastric juice are withdrawn from it during digestion, and at this time not only is the urine frequently neutral or alkaline, but the gouty man may suffer from the discomfort due to the circulating uric acid, and fall asleep over his paper after breakfast, or feel stupid and drowsy after lunch when he ought to be attending to his business.

On the other hand, anything that diminishes the alkalinity of the blood—such as acids or wines, and condiments containing acid, *nux vomica*, opium, and iron—tends to drive the uric acid out of the blood into its storehouses, and so produce a feeling of well-being which may, however, be only temporary and illusory, as the uric acid is not eliminated from the body but only stored away within it, and when the blood becomes alkaline after another meal or after a dose of soda, all the uncomfortable feelings produced by uric acid may again torment the patient.

Again returning to our illustration. If the contents of our dustbin were carried through our passages, they would be flying about and great discomfort would ensue; but if we took care to wet each bucketful with a deodorising solution there would be neither flying dust nor disagreeable smell, and the clearing out

would be done with a minimum of trouble. In the gouty man's body salicylic acid seems to have a similar effect to the wetting the dust; it accelerates the elimination of uric acid while preventing its disagreeable action, and Dr. Haig advises a prolonged course of this drug as a means of permanent cure in gouty patients.

It is hard to say at present what the natural solvent of uric acid is in the body, for it is quite clear that people generally have not got salicylic acid regularly circulating in their blood. Sir William Roberts considers that the pigmentary substances which one finds in the urine probably have a solvent action, and it has occurred to me that possibly a pyrocatechin, which is almost constantly present in the urine, and is nearly related chemically to salicylic acid, may be one of the natural solvents, but I have not yet been able to test this idea experimentally.

I have entered thus fully into Dr. Haig's view of the pathology of gout and the elimination of uric acid because I regard his work as one of the most important contributions which have been made for many years to our knowledge of gout and rheumatism. I do not myself think we have yet got to the bottom of the question. In all probability we shall find that the proteid waste which yields the raw material for uric acid is quite as important, or more important, than the uric acid itself, but Dr. Haig has, at any rate, supplied us with a useful working hypothesis, which may enable us both to foretell the results of certain indiscretions in diet or regimen in gouty people, and to supply us with the means of alleviation or cure. Besides the salicylate of soda, upon which he lays much stress, we find that gouty people are accustomed to trust to baths and watering-places of all sorts for relief, and no doubt a visit to Homburg, Aix-les-Bains, Carlsbad, Marienbad, Brides-les-Bains, Baden-Baden, Wiesbaden, Harrogate, Bath, or Strathpeffer will all greatly improve the health and often protect patients from gouty symptoms for many months, or even years, afterwards.

In visiting these watering-places one is struck by the diversity of the constituents of all of these world-famed springs and the constancy of one ingredient, namely, water. In watching the patients one sees that people who at home never touch a drop of water pure and simple from year's end to year's end, taking it

only in the form of wine, beer, tea or coffee, will, at the spring, drink tumbler after tumbler of water containing common salt with minute traces of other things—as at Wiesbadened or Baden-Baden—or the same constituent with rather more lime-salts at Homburg, sulphuretted hydrogen—as in Aix-les-Bains, Harrogate, or Strathpeffer. I do not mean to say that the saline or gaseous ingredients of these springs are without effect upon the organism—far from it—but at the same time I feel quite convinced that very many people would never require to go to watering places if they would drink more water at home.

Water is the most universal solvent in the world. It is not only useful to wash out our closets and flush our drains, it has a similar effect in our bodies and tends to wash away the waste products from the cells of which our organs are composed, to clear out the uric acid, urea and phosphates through our kidneys and thus prevent renal or vesical calculi, and also wash out our liver and prevent gall stones, while it helps to keep the bowels in action. The liver especially is an organ which suffers much from want of water, and I never see a gall stone without asking the patient “How much water do you drink?” Almost invariably the answer is “I hardly ever touch water. I am not a thirsty person,” and on one occasion a lady called for a particular teacup, which held little more than a thimbleful, in order to show me how much she drank. On reckoning how much water she took in 24 hours it came, as near as I could calculate, to 16 fluid ounces. What wonder then that she had a gall stone. The poor liver had not a chance to make decently fluid bile, and naturally there was a deposit. By making such people drink a big tumbler of water, and especially hot water every morning with or without some Carlsbad salts added to it, and, if necessary, repeating the hot water once or twice more in the day, the renewed formation of gall stones may frequently be averted, and symptoms of biliary colic, to say nothing of so-called biliousness, may be prevented for many years or perhaps entirely. But some patients will not do this at home, and if you were to tell a fashionable lady to get up at 6 o’clock in the morning and walk round Grosvenor Square with a tumbler of hot water in her hand, taking a sip at it every three steps, to go on doing this for an hour together, then to buy at

a confectioner's a penny roll and eat this without butter for her breakfast, with a small cup of coffee and nothing more, she would probably laugh in your face or apply to some one else for advice. But all this and more you secure by simply advising her to go Carlsbad. There she finds everybody else doing the same thing, and instead of marching round and round all by herself or accompanied only by little boys who might point the finger of scorn at her, she finds herself in the company of all the fashionable visitors to the bath and marches to the music of a brass band. The company of others enables her to carry through the tiresome process and to comply with the troublesome restrictions, while the benefit she is sure to derive from it probably makes her feel so strong and happy that she swears by the place ever after, and returns to it again and again. For people who can afford it a visit to such places supplies the best means of cure, but for those who cannot an excellent substitute may be found in the daily consumption of hot water, if they will only have patience and perseverance in its use.

The process of washing out is not only useful in biliary calculus, it is of the utmost value in preventing renal gravel and calculi. The process may be carried on at home by means of hot water either alone or with the addition of a small quantity of some saline, such as bicarbonate or nitrate of potash. In cases where the patient dislikes hot water alone, a slice of lemon thrown on the top of it gives it a slightly agreeable taste, and may overcome the patient's repugnance.

The two watering places where patients with renal calculi chiefly go are Wildungen and Contrexéville, with its neighbors Vittel and Martigny-les-Bains. What strikes one in the waters of these places is that, in addition to other salts, they contain a very minute trace of iron, which appears certainly to be beneficial to the patients. It is supposed to act by astringing the mucous membrane of the pelvis of the kidney, and so allowing calculi to slip down more easily.

There are several other methods of cure which I believe owe their virtues to the fact that they produce pretty complete elimination of waste products by causing the patient unconsciously to imbibe a large quantity of water. These methods are the grape cure, the whey cure and the milk cure. For the grape cure the

patient resorts to some warm, sunny place, where the grapes grow well, and there eats many pounds in the course of the day, while other articles of diet are correspondingly diminished. The ripe grapes contain an enormous proportion of water and very little solid matter, so that the grape cure really comes to be a combination of water drinking and semi-starvation, greatly resembling the Carlsbad cure, to which an additional likeness is given by the laxative effects of the alkaline tartrates contained in the grape juice. The whey cure is very much the same, with the exception that, instead of eating grapes, people drink whey, and that the climate where the cure is carried out is usually a high and bracing sub-alpine one, instead of being soft and sunny. The milk cure is one frequently used in this country with great advantage, more especially in cases of typhoid fever, in chronic diarrhoea occurring in persons who have come from tropical climates, in glycosuria, albuminuria, and some cases of heart disease. Its advantage in typhoid fever is so universally acknowledged that one need hardly say anything about it, but I think it is possible that its efficacy may not be due merely, as is usually supposed, to the milk supplying a bland and non-irritating diet, but may possibly be due also to the waste products of the organism being washed out by the large amount of water which is either contained in the milk itself or added in the form of lime water or soda water to it. The results of an exclusively milk diet in chronic diarrhoea are sometimes quite astonishing, and a few months ago I had a letter from a patient who had been suffering from it for ten years, had tried all sorts of medicine in vain, had just come back from Carlsbad worse than he went, and had nearly given up hope of cure. I saw him only once, and told him that the medicine I gave him might do him good or might not, but that if he did not get well his only hope was to put himself on milk and milk only. This treatment, as he informed me by letter months afterwards, cured him as if by a charm.

In diabetes the milk cure requires to be used with care, and the cases for its use must be selected, for some patients may be injured by the inefficient nutriment which it affords, while others are greatly benefitted by it. The cases in which it answers best are, I think, not those of pure diabetes, but rather those of gouty glycosuria, more especially those in which glycosuria is attended by

albuminuria, and where the low specific gravity of the urine, after fermentation, leads to a suspicion of contracted kidneys. In such cases, and also those of gouty kidney where the urine is free from sugar and has a low specific gravity with a trace of albumen, a diet in which milk forms the chief or only ingredient tends to ward off spasmodic dyspnoea or the uræmic condition which so frequently occurs from imperfect elimination in old gouty cases.

But we must turn now to another channel of elimination, namely, the bowels; and this channel is little, if at all, less important than the kidneys. There is a great deal of truth in the two rules of long life: "Keep your mind easy and your bowels open," and, indeed, easiness of mind depends very much upon the state of the bowels. I remember reading many years ago a story relating to this subject by Norman Macleod, in *Good Words*, but have been unable to verify the reference. It was to the effect that a certain Lady Margaret sent a message down late one night to an old clergyman who lived in the manse not far from her castle, to say that she was in great distress about her soul. "And how are Lady Margaret's bowels?" asked the old gentleman. He learned that the bowels were remiss in their duty. "Here are two pills," said the old man to the messenger. "Let Lady Margaret take them to-night, and I will come and talk to her about her soul to-morrow morning." On going up next day the old man found that there was but little for him to do, for the bowels had done their work, and so far as Lady Margaret's feelings went, had restored health to her soul as well as to her body.

There is hardly a room in the house but will become dirtier if you cannot get your dustbin emptied, but there is hardly an organ in the body that does not suffer if the bowels become constipated. Not only the brain, but the heart, liver, lungs, stomach and kidneys have their functions impaired when the bowels cease to do their duty. Napoleon's disaster at the battle of Leipzig is popularly set down to his having eaten a bun in a hurry and so brought on dyspepsia; but it would be a very curious page of history if we could learn how many wars, how much bloodshed, and how much cruelty have had their origin in imperfect action of the bowels. Washington Irving, in the *Lives of the Caliphs*, tells of a certain emir named Al Hejagi, who suffered for many years from dyspepsia, and this wretched man distinguished himself, perhaps above

all other rulers who have ever lived, in the enormous number of people whom he sentenced to imprisonment and death. He is said to have caused the death of no fewer than 120,000 persons, besides those who fell in battle, and to have left 50,000 in prison when he died himself. How much of all this misery might possibly have been averted by the judicious use of mild aperients it is as impossible for anyone now to tell, as it is to estimate the debt of gratitude which Europe owes to the physician of Louis XIV for the care he took of the bowels of that august monarch.

In mitral diseases and in dropsy, either cardiac or renal, the benefit derived from the free use of compound jalap powder is very great, and in his work on *Purgative Medicines* Dr. Hamilton describes most forcibly the advantages he obtained from purgatives—employed in such a way as merely to clear out the bowels but not to produce a violent purging—in typhus, scarlet fever, marasmus, chlorosis, hæmatemesis, hysteria, chorea, and tetanus.

Like all good plans, that of purgation has been carried on to great excesses, and its use has frequently degenerated into its abuse, so that it has fallen too much into neglect, and been replaced by the feeding-up system. This, too, is good in its way; but we must always remember that if we want a fire to burn brightly we must not only pile on the coals but also ply the poker to remove the ash. Neither the coals nor the poker alone will do—we must combine them; and neither the feeding-up system nor the purging system alone will do, but we must combine them in such measure as is necessary for the welfare of our patients. Now, Nature has herself provided a certain regulating mechanism to attain this end; for, as my friend Dr. Cash has shown, each time that food enters the stomach the bowels receive a certain impetus which is sufficient in healthy people to carry the refuse out and produce an evacuation once a day, the final impetus being usually given by the breakfast, which is sometimes followed by a cigar. In some people, however, the stimulus given by the food is not sufficient, and it is necessary to give a laxative daily. It is no doubt better to do without this, if possible, and by strict attention to regularity and soliciting Nature at a regular hour every day, whether there be any desire to defecate or not, the bowels may at length become regular.

Exercise in many cases is an adjunct, and the mechanical com-

pression which the intestines undergo from the action of the abdominal walls stimulates them to increased contraction. More especially is this the case if the exercise be or the nature of climbing or riding, for in both of these the abdominal muscles contract with considerable power, while in an ordinary constitutional walk along the level road the bowels receive hardly any compression whatever. Where exercise cannot be obtained, abdominal massage, either by rubbing with the hand or by rolling a cannon ball, covered with chamois leather, over the abdomen, may be useful. A draught of cold or hot water in the morning, or going to bed at night, by supplying moisture to the contents of the intestines, may have the desired effect. The hard, indigestible residue of food supplies a healthy mechanical stimulus to the bowels, and I think that in our efforts to save the stomach we sometimes disregard this need of the bowels, and give food which is too soft, too mucilaginous, and too unirritating. Stewed prunes, or stewed pears, by the indigestible cellulose which is skins and gritty grains, figs either raw or stewed, raspberry or strawberry jam by indigestible seed, which they contain, and marmalade by its orange peel, as well as brown or bran bread by its indigestive husks, all supply a mechanical stimulus to the bowels. But even these sometimes fail, or we find that the stomach objects to them, although the bowels may need them, and we must have recourse to the so-called aperients. Frequently when I prescribe a dinner pill, patients say to me: "But, doctor, it is not natural that I should take medicine every day." I say to that: "Quite true. Nor is it natural that you should keep a cook; and if your cook removes from your food everything that is stimulating to the intestines, you must take something to replace what your cook has taken away. If you will go back to the manners and customs of the ancient Britons, live in the green wood and eat acorns and pignuts, you will not want any dinner pills."

Now, the dinner pill supplies a very useful stimulus, and I know a man who has taken one every day of his life for forty years, apparently with great benefit to himself. But there are some people who do not seem to thrive on dinner pills, and they either do not get any action at all, or they get too much. In such cases, instead of giving the intestines one great push once a day by the dinner pill, one may give them a series of gentle jogs by ad-

ding to each meal a minute quantity of a purgative; and I find one-tenth of a grain of aloes, given with each meal, sometimes succeeds when other measures fail, and even these small doses appear sometimes to be too much.

Now, our bodies are like houses in more than one respect, and it is usually found that although each house may be dusted out once a day, there is a regular cleaning up with extra sweeping once a week; and, in addition to this, there is the spring and autumn cleaning of the whole house. Dinner pills and stimulating diet are like the ordinary daily dusting, and while they may answer for some persons, others find that, in addition, they require a weekly clearing out, and if this be not given to them by means of a cholagogue purgative, they have a regular sweepout about once a month by getting a violent migraine with bilious vomiting, and generally they are obliged to fast for at least one day during the continuance of the headache. Besides this, our forefathers used to have a regular clearing out in the spring and autumn, not from the bowels, but from the blood vessels directly, and they were accustomed, as they said, "to be let blood" in the spring and autumn.

The effect of a cholagogue purgative such as a mild mercurial, as, for example, a small dose of calomel, or of blue pill or grey powder, followed by some saline, is sometimes very remarkable. I have seen a quarter of a grain of calomel, with a seidlitz powder next morning, change as naughty a little girl as you would 'nt wish to see into a perfect little angel, and I well remember a little experience which I had some years ago at a friend's house. One morning at breakfast a little boy was very troublesome, and, instead of taking his oatmeal porridge as he ought to have done, he was nudging and bothering his little sister, who was sitting beside him. I said to my friend, "I think your boy's digestion is out of order." "Oh, no," he said, "it is only naughtiness"; but the naughtiness increased so much that the little boy had to be forcibly removed from the table. As soon as the expulsion was effected my friend said, "You are quite right; his breath does not smell right." In such cases as this I do not know any medicine that is better than some Gregory's powder, because it has both a moral effect and a physical action. Its nasty taste when administered as a punishment is wholesome morally, while its action upon the liver and digestion is most useful physically.

Not infrequently adults suffer from nervous irritability, depression, weakness, and inability to do anything, and this is put down on the part of their friends, and frequently of their doctors, to neurasthenia and hypochondriasis. They are treated with nervine tonics, nervine sedatives, change of scene, change of air, baths, waters, advice or scolding, and all to no good. Nervous and depressed they still remain. In some of these cases one may notice a large amount of mucus in the motions, and sometimes there appear to be actual casts of the intestines, long membranous looking shreds apparently tubular in their nature. This condition has been described by the late Sir James Simpson under the name of membranous enteritis, and it is not only usually said to be associated with hypochondriasis, but often it is looked upon as the consequence rather than the cause of the nervous condition, which is certainly its usual concomitant. But it is of no use here to treat the nerves. If you wish for any good result you must treat the bowels. In some, probably in many, cases it depends upon the partial constriction of the intestine near the junction of the sigmoid flexure with the rectum. The motions, lodging here, tend to cause an inflammatory condition of the mucous membrane and profuse secretion of mucus, which either simply coats the faecal masses or forms a kind of false membrane. This condition may be due to actual constriction of the lumen of the gut or to a diminution in its calibre from pressure. In children prolapse of the rectum is a very common thing. In adults it is comparatively rare, but in them a tendency remains, not to prolapse of the rectum externally, but of the sigmoid flexure into the rectum, and this condition may give rise to great nervous disturbance, lasting for years and perhaps indefinitely, unless its existence be suspected and the proper treatment adopted.

One useful remedy—strongly recommended by Mr. Cripps—is the injection of 2 to 4 ounces of cold water immediately after a motion. This is to be retained, and has, as he expressed it, the tonic effect of a cold bath upon the intestine, increasing the contractile power and lessening the tendency to prolapse. I once saw a case of this sort at intervals for two or three years without ever suspecting its nature. It occurred in a man from New Zealand who had been accustomed to a great deal of horse-back exercise, frequently riding 40 miles a day. He began to suffer from neuras-

thenia, hypochondriasis, loss of appetite, failing strength, and emaciation. In fact, he presented almost the typical aspect of the hysterical girls who are so well treated by the Weir-Mitchell plan, and, in consequence of this, I advised him to undergo a course of massage. This he did two or three times with very little good, until, by my advice, he went to Dr. Eccles, who discovered the real cause of his illness, and, by the judicious application of massage to the intestines, completely restored him to health.

But it is not only in the upper part of the intestines and in the sigmoid flexure that the hinderances to elimination exist. Even when the fæcal masses have reached the rectum there may be difficulties in the way of their expulsion. It is usually imagined that nothing can be simpler than to empty the rectum, and yet one of the most grateful letters I have ever had in my life from a patient was for giving instructions in this matter. As the poor lady said she had for many years had great difficulty in emptying the bowels, and no one had ever taken the trouble to instruct her as to the mode of overcoming it. The fact is, one often forgets that the pressure of the abdominal muscles acts in the same direction in defecation as in parturition, tending to drive the fæcal mass toward, the coccyx, and in order that it may be evacuated its course must be finally directed somewhat forward. This change in direction is effected by the muscles of the pelvic floor, but if those are lax, as frequently occurs in people of sedentary habits, and more especially in women who have had large families, the fæces, instead of being expelled, may accumulate in and distend the rectum. This accumulation is greatly favored by the construction of water-closets, as in sitting upon them the spine is usually at right angle with the thighs, the legs are close together, and the pelvic floor is not put upon the stretch. When the body is inclined at an acute angle forward the pelvic floor becomes tighter, and this is still more the case when the crouching or squatting attitude is adopted, which is naturally assumed when emptying the bowels in the open air. In cases where defæcation is difficult this attitude is to be recommended, and a very low commode-pan or chamber-pot should be used in place of the ordinary closet. Should this be insufficient, pressure with the hand close under the tip of the coccyx will tend to force the fæcal mass forward and greatly facilitate its expulsion.

In relation to the complete evacuation of the bowels, I have re-

ceived a very interesting communication from my friend Dr. Bat-
ten: "Mr. R. suffered from pruritus ani, with slight eczema and
a small pile. On examining the rectum a small piece of fæces, the
size of a flat bean, was found just inside the anal orifice, not only
on one occasion, but whenever an examination was made. If the
fæces were removed before going to bed (the pruritus occurred
more at night) the irritation did not occur. Remembering your
plan of treatment with administration of small doses of aloes, I
gave them, but without any success. On inquiry, I found that
Mr. R.'s bowels were moved with great regularity every morning,
and that the motion was not a formed one—at all events, not the last
portion of it. Upon this I reasoned that Mr. R.'s failure to en-
tirely empty the bowel was due to the want of solidity of the mo-
tion not giving the bowel anything to contract upon. I therefore
ordered him occasional doses of lime water, to be taken sufficiently
often to cause a formed motion. The result was very satisfactory.
The bowel contracted on and expelled the solid motion completely.
I think, in our desire to keep the bowels regular, we overlook the
disadvantages of fluid instead of a solid motion."

Before concluding this lecture, I will mention a plan which I
have found of very great service either in cases of cardiac disease,
in fevers, or in conditions of extreme weakness where the feeble-
ness of the heart made it very advisable that the patient should
use as little exertion as possible. It frequently happens that pa-
tients strongly object to use a bedpan, and assert, sometimes with
a considerable amount of truth, that they are unable to empty the
bowels satisfactorily in the recumbent posture. A great deal of
the risk connected with the use of a commode arises from the fact
that when they use it they generally have to get out of bed and
into it again. In these cases I adopt a plan, which I suppose many
others have used also, but which I have never seen described. It
is to have a strong platform made of rough wood, of such a height
that the commode, when placed upon it, is level with the bed. A
large, strong packing box, sawn to the proper height, may answer,
or, if this is not at hand, any carpenter can put together a rough
but strong construction of the kind needed. If nothing else is at
hand, the drawer of a wardrobe turned upside down will do, but it
must be supported from below by books or pillows piled up within
it, so as to prevent the bottom of it from breaking through, as

usually it is not strong enough to support the weight. The commode being pushed close to the bedside, the patient has simply to slew himself round upon it. The body is raised, and the legs are allowed to hang down.

After the bowels have been evacuated, he is rolled round on his side into bed. During the whole process no change is ever made in the level of the patient, the only alteration being in the relative position of the trunk and legs with reference to this pelvis. Perhaps some of the new devices for raising the patient bodily from the bed might do better than this, but generally they are not at hand, and the plan which I have mentioned can always be followed, as some kind of platform sufficiently strong to serve the purpose can be made with boards, boxes, or footstools in every house.

In this lecture I have not attempted to go over anything like the whole field which its title would cover, because I found this to be impossible in the time at my disposal. I have, therefore, attempted to deal only with such points as have more of a practical than a theoretical interest. In concluding it, I thank you most sincerely, Mr. President and gentlemen, for the great honor you have done me in asking me to deliver this lecture, and to beg you to forgive the deficiencies in it, of which no one is more conscious than myself.—*The British Medical Journal.*

Extracts from Home and Foreign Journals.

SURGERY.

THE SURGERY OF THE CAUDA EQUINA.

Dr. Leopold Laquer, in the *Neurologisches Centralblatt*, describes a case of compression of the cauda equina that came under his notice in September, 1888. The patient at that time complained much of a pain in the sacrum, and was unable either to sit or to lie with any comfort. In December, 1889, there was an exaggeration of the previous symptoms, with marked alteration in motion and sensation, as well as some atrophy of the lower extremities. The electrical reactions of both muscles and nerves were normal, and the reflexes were normal. Despite all treatment, the symptoms of pain and stiffness of the lower part of the back continued to increase in severity until September, 1890, when the patient was able to move only in the most careful way, and was obliged to hold his back in an attitude of extreme kyphosis. On the right side the patellar reflex was abolished, and on the left side it was very weak. Sensation was absent in the scrotum and perinæum, and also in the lower extremities. The sexual power was weak. There was some atrophy of the quadriceps of each side, but there were no trophic changes, and there was no ataxia. The patient's condition was one that obviously called for interference of some sort, as death from exhaustion was imminent. The symptoms, taken collectively, led the author to the diagnosis of compression of the cauda equina, from some unknown cause, followed

by degenerative neuritis. Dr. Louis Rehen cut down upon the sacrum, and, laying open the entire canal, disclosed a small extradural tumor in the middle of its lumen. After its removal, further examination of the growth showed it to be a lymphangioma cavernosum. Recovery was prompt. By the end of the second week after the operation the patient was free from pain, and sleep was natural. Four months later there was only a small opening left in the sacrum, the patient was able to go about holding the body in a normal attitude, the functions were nearly restored to the normal state, and the reflexes, though still diminished, were equal on both sides.—*N. Y. Med. Jour.*

CONGENITAL OCCLUSION OF THE URETHRA.

Campbell (*Brit. Med. Jour.*, Feb. 28, 1891) reports a case. No urine having been passed at the end of twenty-four hours, an examination was made, when the meatus appeared to be covered by a thin layer of membrane. No canal, however, appeared beneath it. Assistance was called, and an attempt was made to force a passage. By the aid of a sharp and a blunt probe, a stilette, and a No. 1 silver catheter, a passage was made down to the subpubic arch. Great care was necessary to keep in the imaginary line of the urethra, the only guide being the finger. With the finger in the rectum, a plunge was made forward with the stilette. It entered some place where it met no resistance, but, on withdrawing it and passing a catheter, no urine was obtained. Twelve hours later urine was passed freely. At three years of age the child was apparently in a normal condition as regarded the urethra.—*N. Y. Med. Jour.*

RELATION OF MALARIA TO SURGICAL OPERATIONS.

Dr. M. Perez (*Annals of Surgery*), says one should avoid as much as possible operations in places or districts where malaria prevails.

In cases of operation upon individuals residing in malarial districts, or even those who have formerly dwelt in such regions, although they may never have presented malarial symptoms, they should be subjected to a preliminary treatment by quinine, in order to avoid complications.

Individuals may be met with whom there is a latent existence

of the germ of malaria. These latter may develop when the strength of the patient has been lowered by hæmorrhage, suppuration or other causes.

If one had to decide between a bloody and a bloodless method of operation, the latter should be chosen, for beside avoiding hæmorrhages, a mixed infection is thus prevented.

In cases where operation on account of some suppurative process is necessary, and where malaria has formerly existed, a careful analysis of the urine and an examination of the liver, spleen and kidneys should be made, for the patient may be suffering from diabetes or amyloid degeneration.

If hæmorrhage or intermittent pain follow the operation, they may be combatted by the various preparations of quinine.—*American Lancet*.

STATISTICS OF BREAST AMPUTATIONS.

Terrillon, in a recent number of the *Bulletin General de Therapeutique*, publishes a practical paper on the immediate and remote results of a hundred cases of amputation of the breast performed by himself. They are divided into forty-eight cases of carcinoma with enlarged axillary glands; thirty-one of mixed growths, mainly sarcomatous; twenty-one of adenomata or cystic growths. Out of the first series, forty-two are dead, but recurrence has taken place in all of the remaining six. Of the second series, two only are dead; one of these lived eight years, recurrence taking place in the region of the scapula, the other lived four years, recurrence showing itself in the axillary region. Of the last series all the patients are alive. Thus, out of the whole number submitted to operation, fifty-six are still living, and forty-four were only benefited in varying degrees. With regard to the forty-four carcinomatous cases the following details may be given of the periods of their survival: One patient lived seven years, two survived five years, four four years, five three years, eleven two years, twelve one year and a half, and lastly, eight less than one year. He remarks that recurrence seems to be the rule when, after removing the breast, it is found at the same time necessary to extirpate some of the axillary glands. The recurrence, moreover, most commonly takes place in the first year, that is, there is seldom survival beyond the seventh or eighth year. The paper includes

various remarks about complications arising from the operation and the after treatment.—*The Med. Press.*

HOW TO KEEP NEEDLES FROM RUSTING.

Dr. R. H. M. Dáwbarn writes to the New York *Medical Journal* regarding the above subject; “For the past year I have been pleased with the results of a new plan—new to me, that is, though very probably not to others. This is simply to keep my needles in alcohol. For extreme safety against rust I use absolute alcohol; but the commercial article would probably be efficient. At least, some needles that I have kept in common alcohol for a month as an experiment are as bright as ever. Upon buying the needles I immerse them in benzine to remove grease. Then, after running them through a towel, I plunge the point (a cutting-edge Hagedorn) into a bit of cork the size of a pea—to avoid dulling from jolting—and finally, with their corks, they are put and kept in a wide-mouthed, glass-stoppered bottle filled with absolute alcohol. After use, I sew through a thick, wet, soapy towel repeatedly, cleanse the eye with a thread, immerse in benzine, and finally replace in the alcohol. This last is certainly an efficient disinfectant, besides being an excellent protector against rust. By the bye, I long ago gave up using (save in bowel work) any other than Hagedorn self-threading needles, which are a decided comfort, and, when properly made, do not cut the thread.”—*Medical Record.*

FOREIGN RODIES IN THE AIR PASSAGES.

Dr. Sprengel, of Dresden (*Centralblatt für Chirurgie*), affirms that the question as to which of the bronchi is the seat of a foreign body impacted in the air passages can in many cases be readily and positively settled by the aid of auscultation. It is usually assumed that, if the air does not pass into one lung, the corresponding bronchus is completely closed by the foreign body, and that if the obstruction of the bronchus be incomplete, there will be a sibilant sound on inspiration at the seat of impaction, whilst the respiratory sounds on the opposite side will remain normal. Under certain circumstances, however, the determination of the precise situation of the foreign body may be attended with some difficulty. As a proof of this a case is recorded by Dr. Sprengel

of a little girl who came under his care suffering from much dyspnoea in consequence of the presence of a foreign body in the air passage. There was a sibilant inspiratory sound over the right bronchus, while on the left side the respiratory sounds were almost inaudible. Tracheotomy was performed below the isthmus of the thyroid body, and the foreign body was seen occupying the whole lumen of the trachea, just above its bifurcation. The auscultatory signs in this case are to be explained, the author states, by the nature of the foreign body, which was a large hollow bead, oval in form and open at each end. This, it is conjectured, was fixed at one end into the upper part of the right bronchus, and stretched across the lower end of the trachea, completely occluding by its distal portion the orifice of the bronchus on the left side. Thus the air was prevented from entering into the left lung, whilst it passed into the right lung through the tube formed by the large hollow bead, the narrowness of which, and perhaps an occasional occlusion by mucus, was the cause of the severe dyspnoea and of the sibilant sound during inspiration. This case, it is pointed out, shows that a hollow or tubular foreign body fixed at the lower part of the trachea may, by the signs which it produces, lead one to assume that it is fixed in one of the bronchi, since the air enters one lung and is excluded from the other. The absence of respiratory sounds on one side of the chest, or a sharp whistling sound heard over one bronchus, cannot be regarded as absolutely diagnostic of the presence of a foreign body in a bronchus unless we know that such body is a solid and not a tubular one.—*Brit. Med. Journal*.

MEDICAL

A PROCEDURE FOR ARRESTING ATTACKS OF WHOOPING COUGH.

The procedure employed by a Swiss physician, Dr. Naegely, consists in elevating the hyoid bone and larynx and maintaining it in this position for sixty to ninety seconds. The physician faces the patient and places his thumbs upon the greater cornua of the hyoid, while the index fingers are applied over the ears and the

other fingers over the nucha. This procedure, which at once arrests the attacks, has been also employed by the author with equal success in the treatment of nervous conditions, neuralgia of the trigeminus, hemicrania, globus hystericus, nausea of nervous origin. He finds that one seance is often sufficient to cause the complete disappearance of the pain, while in other cases several sittings are required. More than fifty cases have been treated by this method.—*Semaine Medicale*.

TWO DRACHMS OF IODOFORM AT A DOSE.

The case that I am about to cite is of interest on account of the large dose of iodoform taken by the mouth, the length of time it remained in the intestinal tract, and the comparatively mild symptoms produced.

In response to a call at the Eastern Dispensary, I visited Bridget M., who was suffering from a large axillary abscess. Previous to my first visit the abscess had been poulticed, and I ordered this continued, and prescribed for two drachms of iodoform, to be used in subsequent dressings, and an order for bandages. I requested the nurse (a sister-in-law of the patient) to keep everything after she received them until the next day, which was Friday, or the following day, when I would call and open the abscess.

I called in the afternoon on Saturday and was told that the patient was given the two drachms of powdered iodoform (the amount put up by the dispensary apothecary) on Thursday evening. I hastened in to see the patient, who said she had taken the powder on Thursday evening and felt no effect until Friday night, when she was taken with severe headache, griping pains in the abdomen, and purging, which continued all day Saturday. This in no way alarmed her.

On Monday the pains had disappeared. She had no after symptoms of irritation. The odor was in her breath for several days; also the taste remained in her mouth.

The abscess being so extensive as to require ether, I transferred her to Bellevue Hospital, where she is now.

In justice to the apothecary, I will state that a label "for external use" was on the powder.—*New York Med. Jour.*

TREATMENT OF INFANTILE CONVULSIONS.

First of all, take the child into an airy apartment, remove its

clothing, and see if there does not exist some irritation of the skin, due perhaps, to a pin. Then lay the child on a somewhat hard couch and apply cold ablutions; or else plunge the child in a tepid bath, containing mustard.

The affusions must be made over the whole body, at the same time cold water should be applied to the head, or prolonged irrigation by means of a stream of cold water permitted to fall on the fontanel may be practised.

In Germany and Switzerland, convulsions accompanied by a temperature are treated by cold baths.

As the irritation may come from the intestinal tract, emetics or purgatives should be given, according as it seems advisable.

Where there is cerebral hyperæmia, leeches applied behind the ears, or to the lower extremity of the thigh, or to the tibio-tarsal region, may cut short the attack. In strong children bleeding may even be tried.

Warm poultices to which mustard has been added may be applied to the lower extremities, or the carotids may be carefully compressed.

Chloroform inhalations give temporary relief, but their repetition is dangerous. Great caution must be exercised in their employment.

When the convulsive state prolongs itself we may administer from 5 to 40 centig. of oxide of zinc, with equal parts of hyoscyamus.—*Weekly Medical Record*.

THE NUTRITIVE VALUE OF RECTAL INJECTIONS OF EGG ALBUMEN.

The assertion of Voit and Bauer and Eichhorst to the effect that egg albumen is absorbed by the rectum only in the presence of a certain proportion of chloride of sodium, but is returned unaltered with the feces if this agent be absent, had led Huber to investigate this point anew, and to make his observations on man, and not on dogs, as his predecessors had done. The experiments were planned with great care, and the quantity of albumen removed from the body, both by the urine and the feces, was estimated. As the outcome of several series of experiments, the results of which show a great agreement, the author gives as his conclusion that egg albumen simply beaten up is absorbed by the rectum, but only in very small quantities, and consequently a nutrient enema

of this kind possesses hardly any value. When, however, a certain amount of common salt is added (15 grains to each egg in the present series of experiments,) the quantity of albumen absorbed is doubled. Peptonized egg albumen was absorbed in very slightly greater proportion than that treated with common salt, but of peptonized albumen with salt, between sixty and seventy per cent. was absorbed, and we, therefore, have in this mixture an extremely valuable material for nutrient enemata.

In no case of Huber's were the enemata expelled; nor was albuminuria ever found to occur after their use.—*Medical and Surgical Reporter*.

IRON IN LARGE QUANTITY IN ANÆMIA.

In a very marked case of anæmia in a young girl of 19, H. Taylor, after being assured of the satisfactory condition of the digestive functions, prescribed for her a drink of a diluted solution of the perchloride of iron (v-xxv drops to 30 cc. (3j) of water.) He gave her to understand that the more she took day and night, the better it would be for her, and the sooner would she recover. She entered heartily into his plans, and in twenty-seven days took almost 900 grams (3xxx) of tincture of the perchloride of iron (according to the British Pharmacopœa) instead of 100 grams, the maximum dose with most physicians. There were no unpleasant phenomena on the part of the digestive tract. To keep the bowels regular, he gave daily a pill of aloes and nux vomica. The result was complete cure after four weeks of treatment. The author recommends this mode of treatment, which allows the ingestion of large quantities of iron, without in any way interfering with the health of the patient. Should the iron commence to show any unfavorable effects (constipation, etc.), the patient should stop the medication, which no longer agrees with him.—*La Courrier Médicale*; *La Gazette Médicale de Montreal*

OBSTETRICS.

TREATMENT OF CHRONIC ENDOMETRITIS.

Skutsch admits two forms of endometritis; 1. Hæmorrhagic endometritis with menorrhagia and sometimes metrorrhagia. 2. Catarrhal endometritis, in which there is considerable hypersecretion.

In hæmorrhagic endometritis, the curette is the best remedy. In the catarrhal variety, we must dilate the os, and then make intra-uterine injections. The method of Vullet, which consists in the introduction of iodoform gauze into the cervix, gives excellent results. Sometimes injections are not sufficient. In that case we scrape out the womb. Amputation of the neck may also become necessary.—*L'Union Med.*

CAFFEINE IN POST-PARTUM HEMORRHAGE.

Dr. Misrachi, of Salonica, writes in the *Bulletin Général de Therapeutique* of May 15, 1891, concerning the value of hypodermic injections of caffeine as an adjuvant to ergot in the treatment of post-partum hæmorrhage. While the ergot acts upon the uterine muscle, stimulating it to contract, the caffeine tends to obviate the evil consequences of the hæmorrhage, cerebral anæmia, cardiac weakness, etc. Of course no drugs will be of service when the hæmorrhage proceeds from mechanical causes, such as retained portions of placenta and the like.—*Medical Record.*

HYSTERIA.*

Dr. A. F. A. King (*American Journal of Obstetrics*), says the natural history, origin, and pathology of hysteria have not been, thus far, satisfactorily explained. The disease has been regarded as a functional disturbance of the nervous system, the nature of which is not settled.

Are there not different varieties of hysteria, as there are different varieties of fever?

The most common form of hysteria in women is intimately related with the reproductive and sexual functions, and should be designated as "sexual hysteria in women."

Is it strictly correct to call this condition a "disease?"

Should it not rather be regarded as a functional modification of the nervous government of the body, designed for the purpose of race preservation j

Many of the more common characteristics of hysteria—vix. : (a) The *time of life* at which it occurs ; (b) its not being a *solitary* disease ; (c) the unconsciousness exhibited being only *apparent*, not real ; (d) the woman being *ashamed* of it afterward ; (e) its occurrence chiefly in women who do not reproduce, and its cure by reproduction ; (f) the woman preserving her beauty ; (g) the paroxysms being short and temporary ; (h) the season of the year at which it is most prevalent ; (i) its occurrence in the higher walks of life ; (j) the patient longing for sympathy, etc.—suggest that the hysteric process among primitive women in prehistoric times was favorable to secure the approach of the other sex.

The influence of the hysteric process in this direction indicates that primarily, and without the environments of civilization, approach of the other sex would by it be accomplished.

The modification of nerve government which produces the hysteric process consists in a temporary abdication of the self-conservative ego and an usurpation of power by the reproductive ego. The conflict between these two departments of government has been unknowingly recognized for many centuries, and explains the well-known "double personality" or "double consciousness" of hysterical patients.

The physiological *function* of hysteria, as it occurred before civilization, was to secure insemination. The purpose was *then* usually accomplished. The function of hysteria in civilized communities *not* being accomplished, the cases become chronic and drift into all sorts of irregularities, far removed from the original type, and presenting phenomena that, taken alone, appear to conceal, cover up, or even antagonize any idea of functional activity.

The *rationale* of modern successful methods of treatment is in accord with the preceding views, and tends to corroborate their correctness.—*American Lancet*.

Editorials, Reviews, Etc.

PUBLISHER'S NOTICE.—The JOURNAL is published in monthly numbers of *Forty-eight pages*, at one dollar a year, to be always paid in advance.

All bills for advertisements to be paid quarterly, after the first insertion of the quarter.

Business communications, remittances by mail, either by money-order, draft, or registered letter, should be sent to the Editor, C. S. BRIGGS, M. D., Cor. Summer and Union Streets, Nashville, Tenn.

All communications for the JOURNAL, books for review, exchanges, etc., should be addressed to the Editor.

PROGRESS IN MEDICAL EDUCATION.

One of the most gratifying signs of the times is the steady advancement among the medical institutions of the country in the matter of the requirements for medical education. It is fast becoming exceptional for colleges to graduate students upon a two years' course of lectures. Many colleges require a preliminary examination before admitting students to their halls. In every section of the United States medical men are becoming clamorous for a more elevated standard and stricter requirements, and college teachers are fully as eager for reform as any. Unfortunately, the plan of organization of most medical colleges renders it almost impossible to bring about desirable changes without serious financial disaster. Especially is this the case with Southern colleges. It may be said that in nearly all the medical schools of the South and Southwest the old regime of teaching is still adhered to, and the prospects for establishing more advanced methods are by no means bright. In the North and East, however, the work goes bravely on. Hardly a

medical school of that section but has adopted salutary changes. Among the most recent recruits to the reformed ranks may be mentioned the Medical Department of the City of New York. Three important changes have been announced. First, the financial management of the institution has been placed in the hands of a body separate from the Faculty, and the members of the latter receive stipulated salaries for their services. The Faculty is thus rendered independent of fees of the students, and are free to act as their best judgment dictates. Second, the three years' course of study is required. Third, the course of instruction for the first and part of the second years shall consist of recitations instead of the usual method of teaching by didactic lectures. Thus this medical school has been placed upon the highest plane of the most advanced method of teaching, and hereafter its diplomas will carry additional value and dignity. It is to be earnestly hoped that before many years Southern schools may fall into line with those of the North and East so that medical education in this part of the country may no longer be an opprobrium upon the medical teacher.

OUR readers are earnestly requested, each and every one, to send THE JOURNAL an occasional contribution. No matter how short the article it will always be welcome. Short and practical papers are what we want, for we hold as our highest object in editing THE JOURNAL that it should be suited to the needs of the practical, busy practitioner. Again we would remind our friends that their help is needed to increase our circulation. All we ask of them in this respect is that they speak an occasional good word for us.

WE take great pleasure in acknowledging the receipt of copy for an advertisement of the Sanitarium for Diseases of Women con-

ducted by Dr. J. B. S. Holmes, of Rome, Ga. Owing to some needed alterations of the electrotype, it will not appear until the next issue of *THE JOURNAL*. We therefore direct the attention of our readers to the advertisement in advance. Dr. Holmes is well known to the profession of the South as a competent and thoroughly advanced gynecological surgeon, and his sanitarium no doubt will fill a needed want for physicians throughout that section of the country. The institution will be opened October 1st, 1891.

AMERICAN PUBLIC HEALTH ASSOCIATION.—The 19th Annual Meeting of the Association will be held at Kansas City, Oct. 20, and 23, 1891. The Executive Committee have selected the following topics for consideration at said meeting: "Sanitary Construction in House Construction"—*a* Heating, *b* Lighting, *c* Drainage, *d* Ventilation; "Railroad Sanitation;" "Meat Supplies;" "Milk Supplies of Cities;" "Arsenical Papers and Fabrics;" "Isolation Hospitals for Infectious Diseases in Cities." Papers upon any of the subjects upon which special committees have been appointed; papers on miscellaneous sanitary and hygienic subjects. Blank applications for membership in the Association can be obtained from Dr. I. A. Watson, Concord, N.H., or Dr. E. R. Lewis, Kansas City, Mo.

THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION will hold its 17th annual session at St. Louis, Wednesday, Thursday and Friday, October 14, 15 and 16, 1891. Reduced rates and an excellent programme will bring out a large attendance. The medical profession is respectfully invited. The officers are as follows:

President—C. H. Hughes, M. D., 500 North Jefferson Avenue, St. Louis.

Secretary.—E. S. McKee, 57 West 7th street, Cincinnati, O.

Chairman Committee of Arrangements.—I. N. Love, M. D.,
501, N. Grand Avenue, St. Louis, Mo.

THE August number of Lippincott's Magazine is on our table. It is replete with a number of articles by well known writers. A notable feature of this excellent monthly is the complete novel published in every issue. "A Daughter's Heart," by Mrs H. Lovett Cameron, appears in this number. To all of our readers who desire literary relaxation from their professional labors we can conscientiously recommend this magazine.

WE note, with extreme regret, the death of Dr. Frank H. Potter, of Buffalo, New York, at the age of 32. To Dr. William Warren Potter, his honored father, one of the editors of the *Buffalo Medical and Surgical Journal*, we extend our heartfelt sympathy.

THE Illustrated American Monthly, a New York publication, reaches us in its first number. It is a most admirably gotten up monthly, and will certainly meet with deserved success. The illustrations will compare favorably with those of any similar paper published.

THE management of THE JOURNAL contemplates issuing an extra edition of 5,000 copies for the September number. The attention of advertisers is especially called to this fact, as the occasion will furnish a marked inducement for giving us an order for an advertisement.

PROF. W. L. NICHOL, Registrar of the Medical Department of the University of Nashville and Vanderbilt University, has sailed for a three months' trip to Europe.

PROF. O. H. MENEES, who has been quite seriously ill, is now fast recovering, and will no doubt be able to take up his professional duties in the fall.

Dr. J. P. Crozer Griffith has been elected Clinical Professor of the Diseases of Children in the University of Pennsylvania.

Dr. G. Frank Lydston has been elected Professor of Genito-urinary and Venereal Diseases in the Chicago College of Physicians and Surgeons.

CINCINNATI, O., July 25, 1891.

Dear Sir: We are now cataloguing and will sell at auction early in September the medical library of the late Dr. Frederick Erhman, of this city. Descriptive catalogues will be mailed free to any address upon application to us. Will you be kind enough to announce these facts in the next issue of your JOURNAL, and oblige,

Yours truly,

EZEKIEL & BERNHEIM.

BOOKS NOTICES.

A CLINICAL TEXT-BOOK OF MEDICAL DIAGNOSIS for Physicians and students, based on the most recent methods of examination, by OSWALD VIERORDT, M. D., Professor of Medicine at the University of Heidelberg, formerly privat-docent at the University of Leipzig; later Professor of Medicine and Director of the Medical Polyclinic at the University of Jena. Authorized translation from the Improved and Enlarged German Edition, with additions, by FRANCIS A. STUART, A.M., M. D., member of the Medical Society of the County of Kings, New York; Fellow of the New York Academy of Medicine, Member of the British Medical Association, etc. With one hundred and seventy-eight illustrations, many of which are in colors. Philadelphia; W. B. SAUNDERS, 913 Walnut street. 1891.

Of all the numerous recent additions to medical literature, it seems to us that none possesses such exceedingly valuable properties as this classical work upon medical diagnosis. Other branches of medicine have received the fullest attention of medical writers;

pathology, therapeutics, systems of medicine, etc., have been voluminously written up, but the subject under consideration has, until the present work appeared, been apparently neglected. This treatise meets the wants of the profession in a most admirable manner. It is a translation from the second German edition by Francis H. Stuart, A.M., M. D., of New York City. The work is exhaustive, every disease receiving the attention its importance demands. The arrangement is systematic, as shown by a glance at the contents of the book, as follows : Part I contains two chapters—chapter I, Introduction ; chapter II, Examination of Patients. Part II has reference to points to be considered in General Examinations. Part III is devoted to Examination of the Respiratory Apparatus, of the Circulatory Apparatus, of the Blood Vessels and the Blood. In this section the Digestive Apparatus, the Urinary Apparatus, and the Nervous System are separately handled. The work has been carefully done, especially that of the translator. Copious illustrations, many of them colored, adds value to the work. We are certain this work will be well received by the profession, as it is peculiarly well fitted to aid the practitioner in his daily work. It is needless to add that the work is fully up with the most recent advances in this department of medicine.

FISKE FUND PRIZE, No. XL. The Surgical Treatment of Wounds and Obstruction of the Intestines, by EDWARD MARTIN, M.D., Instructor of Operative Surgery University of Pennsylvania, Surgeon to the Howard Hospital ; Assistant Surgeon to the University Hospital, and H. A. HARE, M. D., Professor of Therapeutics, Jefferson Medical College ; Attending Physician to St. Agnes Hospital. Philadelphia : W. B. SAUNDERS, 913 Walnut street. 1891.

This is a most valuable contribution to the profession upon a subject that has of late especially engaged the attention of surgeons. The fact that the monograph represents an essay for which the trustees of the Fiske Fund of the Rhode Island Medical Society awarded a premium of three hundred dollars, is strong testimony of the value of the work. The work is strengthened by a course of experimental research bearing upon the subject extended by the authors over a period of two years. The essay presents the fullest statistics yet collected upon gun-shot wounds of the abdomen. To all interested in this subject we would most heartily commend the work.

TRANSACTIONS OF THE SOUTHERN SURGICAL AND GYNCOLOGICAL ASSOCIATION. Vol. III. Third Session, held at Atlanta, Ga., Nov. 11, 12 and 13, 1890. Published by the Association.

This handsome Vol. III of transactions is before us. The Committee on Publication is to be congratulated upon the appearance of the volume. It will compare favorably with that of any of the older medical organizations of the country. Not only does the appearance of the transactions speak well for the prosperity of the Association but the general character of papers read at this meeting and collected in this volume bear strong testimony to the fact that the organization is made up of the best representative men in this section of the country.

MANUAL OF THE DOMESTIC HYGIENE OF THE CHILD for the Use of Students, Physicians, Sanitary Officials, Teachers, and Mothers. By JULIUS UFFELMANN, M.D., Professor of Internal Medicine at the University of Rostock. Translated, with the author's kind permission, by Harriot Ransom Milidowski. Edited by Mary Putnam Jacobi, M.D. G. P. Putnam's Sons, 27 West Twenty-third street, New York, and 27 King street, strand, London. The Knickerbocker Press. 1891.

This is a most useful book. While intended chiefly for non-professional readers who have the care of children, it is none the less valuable to the physician. It differs from the usual treatises upon the care of children in that it devotes its attention to boys and girls up to the period of puberty as well as to the care of infants. Of especial value to mothers are the chapters upon the care of girls approaching the critical period of commencing menstruation. The fact that the translation is edited by Dr. Mary Putnam Jacobi is the strongest guarantee of the high character of the work.

PUBLISHER'S DEPARTMENT.

If you wish to attend college this winter you will find valuable information to guide you in your selection by referring to the advertisements of the following well-known schools in this number: Medical Department of the University of Nashville and Vanderbilt University. The Marion-Sims Med. College. University of the City of New York. Med. Dep't of the Tulane University of Louisiana. Jefferson Med. College, Philadelphia, Pa. The Cincinnati College of Medicine and Surgery. University of Louisville; and the Chattanooga Medical College.

WHATEVER may be the theory of the causation of hay fever the question to physician and patient is how shall the symptoms be relieved? Mere mention of the remedies that have been tried would almost make a treatise on materia medica.

Among these we wish to call attention to a few which have proven their efficacy. These may be conveniently described under two heads, viz.: remedies for local use and for internal administration.

Local medication may include cocaine in 4 per cent. solution, in tablet form or in nasal bougies. A good formula for bougies is the following: Hydrochlorate of cocaine, 1 grain; atropine, 1-200 grain; cocoa butter, q.s. The bougie may be held in position by a pledget of absorbent cotton soaked in cocaine solution.

Menthol may also be used with advantage in 10 to 20 per cent. solution in olive or almond oil and applied to the nasal membrane with a brush, or in spray or simply insufflated.

Fluid extract witch hazel, distilled, and fluid hydrastis for local application are often of value in the catarrhal symptoms.

For internal administration to abort the paroxysms *grindelia robusta*, *euphorbia pilulifera* and *quebracho* may be resorted to either alone or in combination. These remedies have shown their specific antispasmodic action in asthma, and accepting the neurotic origin of hay fever, must be conceded to be of service in restoring normal respiratory action in the distressing paroxysms of hay fever.

Parke, Davis & Co. supply all of these agents in eligible form, and will afford all desired information concerning them.

After using continuously in my practice eight ounces of antikamnia, pure and simple, in all diseases for which you recommend it, I assure you, unsolicited, that it has fulfilled every promise you made.

After nearly twenty-five years of hospital and private practice, I would rather abandon morphine than antikamnia, which I also consider an unequalled febrifuge. Indeed its antipyretic qualities are wonderful in reducing the temperature.

I have never had a patient object to taking the dry powder on the tongue, nor had one complain of feeling the slightest malaise after its administration. I know I am making sweeping assertions, but you should know the truth so as to be encouraged in your work.

Truly,
CALEB LYON, Rossville, Staten Island.

SATISFACTORY.—Prof. F. L. Sim, Editor *Memphis Med. Monthly*, and Dean of the Hospt. Med. College of Memphis, Tenn., says:

I have found entire satisfaction from the use of your "Dioiviburnia" in my practice.

Read the advertisement of the Moerlein-Gerst Brewing Co., in this No. They will furnish, on application physicians of Davidson county, a sample case of their delightful Old Jug Lager free of charge. Be sure to avail yourselves of this liberal offer, and you will be convinced that Nashville has the best brewery in the world.

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Original Communications.

INFLUENZA.

BY E. S. M'KEE, M.D., CINCINNATI, O.

Influenza is an epidemic, or perhaps better, a pandemic, which sweeps rapidly over the globe in the direction from east to west, being equally prevalent in all climates, and among all classes of society. The disease has a score of names, according to the countries through which it passes, the most common of which are influenza and la grippe. Influenza, the generally accepted term, is a name given by the Italian savants of the seventeenth century, because they thought it due to the influence of the stars. La grippe is said to come from the Polish *crypka*, meaning hoarse, but is most probably from the French word *gripper*, to seize, from the suddenness of the attack. This word is very easily changed into the English word "grip," which, to those who have had it, is a

very meaning term. The Germans call it blitz catarrh, which is also expressive.

The origin of the recent epidemic of influenza, according to Clemon,¹ began in Siberia, at Tomsk, October 18, 1889, but Heyfelder asserts that it existed in Russia in the summer of 1889. In the early part of December, 1889, it appeared in Berlin, Paris and Austria, and in the latter part of December in London and New York. It reached Italy, Greece and North Africa about the same time or a little later. The Vienna correspondent of the *Medical Presse*² says it had its origin in or about Wassite, Ostron and Kolomna, southwest of St. Petersburg, about the last week in October, or the first of November, 1889, and spread rapidly to the capital. Within three weeks from its first appearance the half of the populace of St. Petersburg were rendered prostrate by its influence. Buckingham³ relates that an epidemic closely resembling the recent influenza always appears twice a year, in January and August, in the Caroline Islands, attacking nearly everybody. This might be called the home of the influenza, providing the complaint is not hay fever.

Guiteras³ dates epidemics of influenza back before the Christian era—an outbreak having occurred in the Athenian army, in Sicily, B. C. 415. Epidemics occurred at regular intervals, sweeping over Europe from east to west, of which no exact records have been kept up to the year 1510, when it prevailed in the British Isles to an alarming extent, and quite an accurate account of the epidemic was written. About twenty well-recorded outbreaks followed in the years from 1557 to 1879, besides many others of minor importance.

It travels with greater rapidity as facilities for rapid transit improve. In about six weeks it traveled from the neighborhood of St. Petersburg to New York, which beats all former records. The extent of the disease in London may be imagined by the statement that the loss in wages due to the influenza in that city amounted to \$5,000,000, and that a like amount was paid out in

1 Schmidt's Jahrbucher, 1890.

2 New York Med. Record, Feb. 11, 1890.

3 New York Med. Record, Jan. 25, 1890.

4 Boston Med. and Surgical Journal, 1890.

5 New York Medical Record, July 19, 1890.

insurance and sick dues by the different mutual aid societies. During the summer of 1890 the disease appeared in Iceland⁶ and spread with great rapidity. Former epidemics in this island were very fatal. About the same time it appeared in the Azores.⁷ In October 100,000 cases were reported in Tokio, Japan.⁸

A Paris correspondent⁹ tells us that on its first appearance there the faculty made light of it, even the Academy of Medicine assuring the people that the visitation would be a comparatively harmless one. It turned out to be worse than either of the three cholera epidemics of 1854, 1865 or 1884 in Paris. They were later informed that it was not the influenza which killed, but its sequel. While in Paris it was given the Anglo-Italian name of influenza. In America it was called la grippe. In Paris children were largely exempt. From 20 to 60 years the death-rate was three times the average, over 60 only twice. Nearly twice as many males died as females. Wealth conferred no preventative; only the army in actual service enjoyed remarkable immunity.

The etiology of influenza is discussed by Dowd¹⁰ who found in a series of observations embracing about 30 cases the diplococcus pneumoniae of Fraenkle-Weichselbaum, the predominant form. In six series, embracing 60 or more cases, streptococcus pyogenes were found in the lungs, sputum, and other secretions, and in various exudations, and each was found a great many times in pure culture, *e. g.*, in the pus of otitis media. Finkler finds pure growths of one, and Levy finds pure growths of the other. The general belief is that they have not been the cause of the influenza, but that they have developed as the influenza has provided them with a suitable condition for growth, and that their development may have caused some of the complications.

Bacterial studies in influenza have been carried on quite diligently by various observers. Prudden¹¹ found in two or three cases of simple influenza associated with bronchitis very large numbers of streptococcus pyogenes, which was the prevailing spe-

6 New York Med. Record, Sept. 13, 1890.

7 Corries' Med., Lisbon, 1890.

8 New York Med. Journal, Oct. 18, 1890.

9 Therapeutic Gazette, Feb. 1890.

10 Medical Record, March 29, 1890. Analectic, April, 1890.

11 N. Y. Med. Record, Feb. 15, 1890.

cies; all the rest were scattering forms, most of them ordinary aerial bacteria. In the other cases of bronchitis there were large numbers of diplococcus pneumoniae of Fraenkel and Weichselbaum associated with a few streptococcus pyogenes aureus and several scattering forms. The latter were the only pathogenetic species found. It would seem from these studies that the relation of influenza to pneumonia is that of a predisposing factor only. The results of his investigations were rather negative. Rikert,¹² in bacteriological studies of five cases of influenza, three with, two without pneumonia, showed that the only species constantly present was the streptococcus pyogenes. The diplococcus pneumoniae he did not find at all. He very guardedly suggests the possibility that the streptococcus, in association with some unknown peculiar atmospheric condition, may cause the disease. Whether this be true or not he would lay stress upon the probable importance of the streptococcus in inducing various complications.

The contagiousness of the influenza has been thoroughly discussed. Trudeau,¹³ in charge of the Adirondack Cottage Sanitarium for Consumptives, fearing that an attack of the prevalent influenza might be disastrous to the many consumptives, quarantined the place against the disease as soon as it appeared in the neighborhood. His patients escaped it, though it was prevalent about them. To offset this, Armstrong¹³ reports having treated over 200 cases without getting the disease, but did have it at a much later period when he was treating no cases at all.

D'Hoste,¹⁴ surgeon to the St. Germain steamship, reports that that vessel left Saint Nazaire December 2, 1889. December 5th a passenger embarked from Madrid, where the influenza was raging. The next day this passenger was taken ill; four days later the doctor treated a servant. From December 12th to January 7th 159 out of the 436 passengers and 147 men of the crew became afflicted with the malady. The epidemic was slight, and no deaths. Hence the conclusion that la grippe is manifestly a con-

12 Deutsche Med. Wochenschrift, Jan. 23, 1890. New York Med. Record Feb. 15, 1890.

13 The Sanitary Inspector, 1890. New York Medical Record, April 26, 1890.

14 N. Y. York Med. Record, Mar. 1, 1890.

tagious and transmissible malady, and that not only in its grave complications, as established by Prof. Bouchard, but also in its simple and benign form.

The varieties of the fever itself are divided into three groups by the Vienna correspondent of the *Medical Presse*:²

1. Those with pure nervous symptoms, as headache, pains in the limbs, neuralgia, pains in the trunk as in pleuritis. The respiratory and pulmonary mucous membrane normal as well as the alimentary canal. This form is the most common, and has on many occasions been diagnosed as typhoid.

2. The catarrhal form, bronchial catarrh, sneezing continued several days after the fever subsides.

3. Gastric catarrh of the alimentary tract with persistent vomiting.

This writer gives the temperature as rising rapidly to 104°-108° F. (40°-40.5° C.). It remains at this height about two days, and rapidly falls. The duration of the fever is usually three seldom five or six days. Very little alteration of the spleen is observed. Convalescence is very variable, and seems to depend more on the intensity of the attack. Relapses are not uncommon.

Shattuck¹⁵ found the most striking feature of the disease the prominence and frequency of nervous symptoms—the predominance of these, on the whole, over catarrhal symptoms, respiratory or abdominal. He is, however, inclined to think that this is due partly to the fact that of late years our attention has been directed more to the part played by the nervous system in the various diseases. Pneumonia was unusually prevalent during the height of the influenza epidemic. Statistics of large mills where great numbers of hands were employed show that about 40 per cent. had the influenza, and that less than 50 per cent. of those severely attacked by influenza acquired pneumonia. Pneumonia followed the influenza in such a large proportion of cases that somewhat of a connection was proven between the two affections.

Guiteras,¹⁶ in a large dispensary practice, found only about 10 per cent. suffering from nasal catarrh, 2 per cent. suffering from an intestinal form of the disease having the same general

15 N. Y. Medical Journal, June 14, 1890.

16 New York Med. Record, Jan. 4, 1890.

symptoms as the others, with the exception that the catarrhal symptoms of the stomach and intestines have been most marked, and have shown themselves in vomiting and diarrhœa; severe frontal headaches, seem to occur in all cases. Pains in orbits and eye balls were only marked in about 10 per cent. of the cases. Pains in bones and muscles were complained of in about 40 per cent. of the cases.

Pepper¹⁷ thinks there is much evidence to show that the exceptionally severe pains about the chest, with pains in different parts of the body, in this disease, might be considered partly due to general neuritis or perineuritis of varying degrees of intensity. It would seem that the view of the infectious origin is strongly supported by many facts. The existence of such neural trouble has been made clear in a number of cases by muscular and sensory sequellæ. Such a condition of the intercostal and respiratory nerves and possibly of the pneumogastrics themselves, may be invoked to explain not only the chest pains, but the extraordinary weakness of the respiratory murmur noted in so many pneumonia cases.

A valuable report is made by the Secretary of the Massachusetts State Board of Health.¹⁸ Ratio of general population attacked, 40 per cent.; industrial establishments employing large numbers, 35.5 per cent.; inmates of public institutions, 29 per cent. Ratio of persons occupied obliged to leave their work 27 per cent.

The urology of influenza is discussed by Chappelle,¹⁹ he says that according to Haynes all influenza patients have urobilin in excess in their urine. Huchard finds a constant diminution of phosphates. Fernet, on the other hand, finds an increase in both urates and phosphates. Gautrelet ascertains that in the urine of these patients there is some hyperacidity and some increase of indican. Chappelle finds constantly hyperacidity, an excess of phosphoric acid and richness in coloring matter. Indican, he found four times in the eleven specimens examined. He did not find urobilin in excess, but generally below normal. Neverthe-

17 Medical News, July 5, 1890.

18 New Medical Record, Dec. 13, 1890.

19 Lyon Medicafe, June 1, 1890. Dublin Journal Med. Sciences, 1890. Journal American Medical Association, Aug. 23, 1890.

less all the urine examined was rich in chromogen, sometimes called urososein. In two cases he met with skatol.

Lesions in the spinal cord are described by Foa.²⁰ There were numerous hæmorrhagic foci found on microscopical examination, notably in the upper two-thirds of the dorsal and the upper portion of the cervical regions, chiefly situated in the posterior columns, almost always at their periphery. Degenerative foci were found, mostly in the lateral columns. He thinks these due to occlusion of vessels, probably caused by an accumulation of micro-organisms.

Hysterical symptoms following influenza are reported by Grasse,²¹ of Montpetin. A similar case is recorded by Trousseau. Ranzier reports a case of hysteria in the male following la grippe, the patient being a soldier aged 28, of previous good health.

A case of Ménières' disease, aural giddiness, provoked by influenza, is recorded by Monly²² who believes it to be a common occurrence for influenza to damage the balancing nervous apparatus. He thinks the most likely suggestion to be an effusion into one semicircular canal, but which one he is unable to detect. It seemed a peculiarity of the nervous discharge to cause vomiting and defecation.

Aural and cutaneous complications in influenza is discussed by Eitelberg²⁴ who states that during the recent epidemic in Vienna he had seen at least a hundred cases of such complications; although very painful, the patients spending sleepless days and nights from the agonizing pains shooting through the head and shoulder, the cases as a rule ended exceedingly favorably in complete recovery in a comparatively short time. The average duration was from eight to ten days. Urbantschitsch²⁴ found among numerous cases one of vegetation, in two cases the mastoid process was transiently affected, and in two others deafness remained behind for a certain time after the inflammation had run its course.

20 British Medical Journal, 1890. Journal American Medical Association, Aug. 2, 1890.

21 Lancet, April 26, 1890. Analectic, May, 1890.

22 Lancet, May 3, 1890. Analectic, July, 1890.

24 Wiener Med. Presse, 1890. Brit. Med. Journal, July, 1890. Therapeutic Gazette, Aug., 1890.

Schmimmer^{24 25} expresses the belief that the streptococcus is the cause of the erythematous and erysipelatous skin affections met with in influenza. Extensive erythema were observed in St. Petersburg. In Paris erythematous skin inflammation, and occasionally also papular eruptions. In Berlin and Vienna erythema, herpes, and urticaria. Towne²⁶ reports in Paris a considerable increase in inflammatory aural troubles, the most common form being the classical acute otitis media. None proved fatal and all were easily amenable to treatment. Considering the easy transmission of catarrhal affections from the nose to the eustachian tube, and even the drum, none will wonder at the spread of ear diseases.

Alopecia areata following influenza is reported by Williamson.²³ A widow and her seven children all had the influenza at the same time. The mother had severe headaches which continued for a long time and were followed by loss of hair, which resulted in baldness in patches over the course of the supra orbital and occipital nerves, and the skin was very tender to the touch. Each patch exhibited the usual characteristic signs of alopecia areata.

Aphasia following influenza is reported by Poole²⁷ in the case of a young woman who had just been confined. Diffuse enlargement of the lymphatics, especial enlargement of the bronchial glands even to advancing suppuration is reported by Todd²⁸ as occurring in the cases in his city, viz., Pottstown, Pa. Kinnicut²⁹ has found obstinate and acute neuralgia as sequellæ in many cases most frequently implicating the tri-geminal and sciatic nerves. He has seen two cases of puerperal neuritis of moderate severity, but not accompanied by atrophic symptoms. The mental depression so prominent and common a manifestation has a suicidal impulse, occasionally associated with it. Two cases of herpes zoster, one of vaso-motor paresis. Convulsions were noticed in children.

Guiteras²⁹ writes concerning the dermatoses of influenza. The

23 Lancet, June 7, 1890. Analectic, July, 1890.

25 Orvosi Hétlap, 1890.

26 Therapeutic Gazette, Feb. 1890.

27 Edinburg Medical Journal, Aug., 1890. Analectic, Aug., 1890.

28 Medical News, July 5, 1890.

29 New York Med. Record, Feb. 22, 1890.

most important he finds to be the erythema which occurs in certain cases, and which so particularly marks them that he gives it the name influenza erythematosa. This so closely resembles scarlet fever that it requires a very careful diagnosis to differentiate them. Herpes labialis was observed in several cases, principally in the catarrhal form of the disease. Milliaria in the papular form. Urticaria has occurred in the gastric type.

The treatment of la grippe and the difference of that which prevailed during the second winter from that of the first is the subject of a discussion taken part in by Childs³⁰ and nine others. They used quinine, dovers powder, phenacetine, salicylate of sodium, salol and digitalis. The editor³¹ of the *Medical Press and Circular* mentions the treatment of the Russian hospitals as antipyrine, gr. 2; codeine, gr. $\frac{1}{6}$, with a little bicarbonate of sodium, a spray of wine of ipecac, and a dose of dovers powder at bedtime has the credit of aborting the disease. Quinine and tonics, meat and wine preparations are very useful after the acute stage has passed and the patient enters upon a limp and protracted convalescence. Dujardin-Beaumetz,²⁶ and other Paris physicians, used quinine, also exalgine and analgesine. Huchard³² says the severe nervous prostrations require alcohol, quinine and, in bad cases, even injections of caffeine and ether. In the neuralgic or rheumatoid form of influenza antipyrine, 15 grains, combined with the bicarbonate of sodium, $7\frac{1}{2}$ grains, is recommended every four hours, or instead of antipyrine, phenacetine or salol, 7 grains. Guiteras³ recommends whiskey very highly to counteract the great prostration, and digitalis where the heart is weak.

Electricity in the treatment of the neuralgic and rheumatic pains of influenza has been remarkably successful in the hands of Worthington.³³ In some cases the relief was immediate and permanent. The pains in the back, groins and sternum, of which so much

30 Southern Medical Record, Jan. 1891.

31 Medical Press and Circular, Dec. 25, 1889.

32 Revue Journal de Clin. de Therapeutique, Dec. 12, 1890. Therapeutic Gazeette, Feb., 1890. Lancet, Dec. 21, 1889. Med. Record, Jan. 11 1890. Medical Record, April, 12, 1890.

33 British Medical Journal, 1890. Journal American Medical Association, June 28, 1890.

complaint has been made, yielded at once to 30 or 40 cells of Leclanché's battery.

Shrady³⁴ says, in a valuable editorial review of the epidemic, that we have on the whole passed through it as well as could be expected and better than was feared. There has been a good deal of suffering and many have to mourn for those whose sufferings are past; but there is less of this than might have been and, now that the enemy has gone, we congratulate ourselves that his guns were not so large as we feared they were when we first heard their echoes from a distance.

³⁴ New York Medical Record.

GRAFTING AND INOCULATIONS OF CANCER IN
MANKIND.*

RY M. CORNIL, PARIS.

Attempts have been made for a long time to obtain sight of the graft and multiplication of cancer cells in the sound tissue. This question is very important in the reproduction by grafting where an injection of cancerous liquid and a suspicious parasitic cause leads to the etiology of cancer.

The results of the experiments of M. Moran in the mouse (*Bulletin Medicale*, 1891), and the cells de Manau in the rat is, that grafting and inoculation of cancerous liquid can be successful in some species or in an animal sustaining the original tumor.

These two valued observations which I officially report to-day are not less conclusive. They are not brought forth by a foreign surgeon, whose name I will pass over in silence and whom I will not undertake to justify. They are never made public if they do not appear of great scientific interest.

The first to treat was a female attacked by a large tumor of the breast. The operator, before extirpating this tumor, took a section of a very small fragment and inserted it under the skin of the breast of the opposite side which was perfectly normal. This inoculation was made under the influence of chloroform with the most minute antiseptic precaution.

Nothing was observed during the first day resulting from this grafting. The skin was healed by first intention and there was not a trace of inflammation. But soon an indurated nodule was noticed which grew rapidly, reaching about the size of an almond in two months. This was removed by the same surgeon.

*Read before the Academy of Medicine, Paris, June 24, 1891. Translated from *La Bulletin Medicale*.

I received the fragments, and the histological preparations of the tumors developed before the grafting.

The tissue of the first and second presented identically the same structure. The fasciculated-formed sarcoma in question, the long cells disposed in fibro-plastic bundles intersecting each other.

The graft presented a great quantity of carcinomatous cells as these developed and grew rapidly instead of in the course of the tumors. The ovoid nuclei of the cells of the sarcoma often showed figures of being indirectly divided in two.

It is very evident that this species of tumor is a sarcoma fascicule.

The transplanted tissue has continued to live and has so developed as to verify the structure, the vascularity and the observed carcinoma. The tissue has not vegetated solely as a parasite, which isolates itself from neighboring particles and possesses an individual life. These vessels anastomose with those of the vicinity, these cells penetrate from place to place in the normal peripheric tissues and determine their transformation to sarcoma. The patient succumbed a short time previous to an acute inter-current malady.

An autopsy was made with care. She presented no trace of sarcoma in any part, neither in the lymphatic glands, nor the internal organs, nor in the spongy tissues of the bones.

The objection may be raised against the practical grafting, that the person is in the power of the tumor which is grafted. It may be said there is a predisposition to a secondary formation, that the bearer of the first tumor has therefore special acquirements and a special receptivity.

This is reasonable and perhaps true. The graft takes more surely in an animal which presents a cancerous tumor, which has been grafted on itself a fragment from the tumor, as M. — has demonstrated in using it successfully in sound individuals of the same species.

In the observation of an anonymous surgeon whom I will quote, it is certain that the secondary tumor is due to the graft and is not a secondary nodule coming because of the sarcomatous infection, for there is no part in the structure of secondary sarcomatous neoformations.

The second observation relates to a cancer of the breast. Before

the removal of the diseased breast, under the influence of chloroform, the surgeon inserted in the glandular tissue of the breast on the other side, a small piece removed from the tumor. The graft followed the same evolutions. Healed by first intention, no inflammation and nothing appeared the first day. Afterward, at the end of several weeks, a nodule appeared which developed as a neoplasm. A histological examination of the first patient did not wish to submit to an operation, but the effort to take away the graft produced a small tumor. She left the hospital and has not since been followed.

This case, which is less conclusive and less satisfactory in its conclusions than the former, does not prove the impossibility of the grafting of a tumor of a known histological species, as the tubular epithelial cancer.

These two given facts demonstrate that a particle of sarcomatous and cancerous tumor coming in contact with normal tissue may be carried by the individual, the graft becomes fixed, develops, invades the sound tissue, is transformed into a neoplasm and becomes a graft of the neoplastic tissues with the same cells.

This process necessitates an immediate union of the grafted with the sound tissue.

The cells of an abdominal neoplasm are numerous, more or less detached from the surface, in connection with other normal points of the serous membrane. They will graft themselves and produce these secondary multiple nodules, the germs will be distributed by the formation of little neoplastic granulations which multiply themselves.

An ovarian tumor, for example, which is benign while limited to the fibrous cap of the ovary will move from that point and form secondary peritoneal nodules at the time where numerous branches of the tumor will perforate the covering and come in contact with the serous membrane.

The pathologists take a substance and produce a fact in the similar case made by the hypothesis of the graft.

In effect a general proposition can be made that when the blood vessels and lymphatics carry the cellular and liquid elements showing the neoplasms and that which is active with greater intensity when the graft is distributed by the circulation of the blood and lymphatics.

M. Le Fort—I cannot pass without protesting against the surgical experiments of this kind which M. Cornil makes.

M. Cornil—I have given my opinion with reserve, my dear colleague, and I far from approve the action of the surgeon which I have related.

M. Moutard-Martin—I believe the action of this surgeon is indeed a criminal action, and I desire that this opinion, which is that of M. Cornil and Le Fort, and also appears that of the Academy, shall be well emphasized.

A CASE OF PLACENTA PRÆVIA.

BY W. H. F. RHYNE, M.D., CHELSEA, GA.

May 19th I was called to a woman pregnant and nearly at term, who was flooding profusely. On making a digital examination I found the case to be one of placenta prævia. The hemorrhage being so profuse as to cause serious alarm, I used a tampon, which controlled the hemorrhage effectively. To relieve pain I administered $\frac{1}{2}$ grain of morphine hypodermically, which only had the effect of exciting her, so that after a suitable interval I gave her 20 drops of deodorized tincture of opium, with the effect of procuring for her a good night's rest. The patient did well until May 27th, when I was called again in great haste to see her, as she was again flooding to an alarming extent. She had lost a great deal of blood and was very much weakened. The loss of blood was much greater than before. A second time I resorted successfully to the tamponade, and sent for consultation. Dr. A. met me in consultation, and on removing the tampon the hemorrhage was so alarming as to necessitate its reëntroduction. Dr. B. was added to the consultation. In the joint examination the os was found slightly dilated. After a short delay the os was found sufficiently dilated to admit the hand. Ether was administered, the hand passed into the womb, the membranes ruptured, the feet grasped and brought down, and the child delivered. All hemorrhage ceased. The cavity of the womb was cleaned with vinegar. On the second day she had a severe rigor, followed by high temperature. Tenderness about the abdomen. Pulse rapid and small. Temperature ran up on third day to 104°, but was controlled by acetanilide, 6 grains every 2 hours. On the fourth day temperature was 107, pulse 156. Antifebrine seemed to have no power to control fever, so we used tinct. of aconite, one

drop every hour until temperature was reduced to 104. Patient was better the following day, but she had a number of rigors, and the thermometer ranged from 102 to 105, and the pulse 130 to 145 for several days. The patient gradually became better, the swelling and tenderness slowly subsided, and she finally fully recovered.

The case is interesting, especially, by reason of the high grade of puerperal fever following placenta prævia, resulting in complete recovery.

HOSPITAL OF THE GOOD SHEPHERD.

SERVICE OF

CHARLES S. BRIGGS, M.D.

REPORTED BY A. B. COOK, M.D., HOSPITAL INTERNE.

CASE I.—RE-AMPUTATION OF THE ARM.

Crawford T., white, age 17, private patient from Wilson County, Tenn., brought to Dr. Briggs for treatment by Dr. Crutchfield. Admitted June 22, 1891.

Some seven weeks before admission the patient had his arm completely taken off by a circular saw while at work in a saw mill, the section taking place a short distance above the elbow. Before the physician reached him he had lost a great deal of blood, being almost entirely exsanguinated. The desperate condition of the patient and the lack of assistants rendered a regular amputation at the time impossible. The wound was cleansed, the arteries secured and the bone covered with the integument drawn together with sutures. The resulting stump healed nicely, leaving, however, a redundancy of tissue at the lower and inner aspects of the stump, where a small fistulous orifice presented.

June 21st, while carrying a bucket of water to a wheat field, he slipped and fell, striking the stump with the full force of the fall against a stone. The force of the fall reopened the wound, the bone protruded, and hemorrhage to a considerable extent occurred. In this condition he was brought to the hospital, where the part was prepared antiseptically for amputation.

June 23rd amputation was done at the junction of the middle and upper third of the arm by antero-posterior musculo-cutaneous flaps. The parts were abnormally vascular, necessitating the employment of an unusual number of catgut ligatures. The most

careful attention was given throughout to the observance of all antiseptic details. The features worthy of note in this case were:

1st. The manner in which the flaps were made. The anterior was made after Langenbeck's method, that is, the tissues of the arm were grasped in the left hand and the flap made from without by cutting in an oblique direction directly down to the bone. The posterior flap was made by transfixion.

2nd. The copious irrigation with a hot bichloride solution until the faces of the flaps were absolutely clean, fully six gallons of water being used.

3rd. The employment of five deeply placed, buried catgut sutures to approximate the muscles of the stump over the bone.

4th. No provision at all was made for drainage, the flaps of integument being closely joined by a number of interrupted catgut sutures.

The history of the case after amputation was smooth and uneventful. At no time was there a variation of temperature or acceleration of pulse. The stump was dressed for the first time on the eighth day, and found to have healed throughout by first intention, the parts not showing the slightest blush and not a drop of pus. The patient returned home on the tenth day after admission to the hospital.

CASE II.—TALIPES CALCANEO-VALGUS.

John Turner, age 9 months. Double congenital talipes calcanéo-valgus. Upon careful examination it was determined to make a subcutaneous tenotomy of the extensor longer digitorum, which tendon seemed to be most tightly contracted and to adjust afterward a simple shoe-brace for correction of the valgus.

Under ether the operation was done on both feet, the tendons being divided just as they emerge from beneath the annular ligament. The result was immediately apparent; the correction, however, being most satisfactory in the left foot. The wounds healed rapidly without accident, and the shoe braces applied. The result not being as perfect as desired, it was determined to make a second operation, consisting of open aseptic division of all the extensor tendons extending from the external malleolus to the base of the fifth metatarsal bone.

The patient, however, died from entero-colitis June 22.

CASE III.—CONGENITAL ATRESIA VAGINÆ, WITH HÆMATOKOLPOS;
OPERATION.

Sadie W., age 14, private patient brought to Dr. Briggs for treatment by Dr. J. D. Sory, of Madisonville, Ky. Patient tall and extremely fragile and delicate in appearance, just at the age of pubescence, mammæ slightly developed, small growth of hair on pubes.

For several months previous to admission the patient had suffered constantly with intense pains aggravated in character at monthly periods in the lower part of the back and pelvic regions. The menstrual flow had never shown itself. The occurrence of a number of violent convulsions consequent upon the last of these attacks led to an examination of the genitals when the nature, of the trouble at once became manifest. Upon examination at the hospital a large globular swelling was found in the lower part of the abdomen, principally upon the right side. The finger in the rectum detected the regular outlines of the swelling and an indistinct fluctuation could be made out. A slight depression marked the site of the vagina. The occlusion was due to a thick membrane, much more dense and tough than the surrounding tissues. The hymen was perfect, circular in shape, and presenting an opening through which the obstructing tissues could be seen. Under ether anæsthesia, with a finger in the rectum and a guide in the bladder, a linear incision was made and carefully deepened in the direction of the womb to the extent of an inch and a half. After a tedious dissection the distended upper portion of the vagina was found and opened to a sufficient extent to admit of the index finger. The parts were freely dilated, and the patulous os uteri found. The womb was greatly distended with the accumulated menstrual fluid of probably six periods. Over a quart and a half of this retained semi-fluid matter, of a dark color, thick, tarry consistence, was evacuated. It came away slowly, and with some difficulty, being withdrawn by the fingers in long ropes. The cavity of the womb was thoroughly irrigated with a hot bichloride solution until it came away perfectly clear. There was very little hemorrhage, a large rubber drainage tube was placed in the womb up to the os uteri, and strips of iodoform gauze packed around it. Patient reacted slowly from the operation. Diarrhœa

came on during the night following, which was checked by opiate enemata. Catheter used to empty the bladder for two days, when its function was restored. July 1st, patient was placed on the table, the drainage tube removed and Sim's glass vaginal plug introduced. July 14th, the glass plug was left out for twenty-four hours, an attempt to re-insert it met with failure owing to firm adhesions which had taken place during the short interval.

These were forcibly broken down with the finger, but the os uteri could not be located. A larger tube was then inserted. A copious offensive discharge from the wound developed requiring the use of the hot bichloride douche and insufflation of boracic acid.

July 22nd Fergusson's speculum was used. Extensive inflammatory deposits in the upper part of the vagina. Cervix uteri entirely obliterated. Probe passed into the os uteri and carried into the cavity of the womb. The plug was worn constantly and without pain. The discharge diminished gradually. The new vagina admitted finger readily without giving pain.

July 27th, four weeks from the date of operation, no sign of menstruation. Patient apparently well and gaining strength every day. Patient left for home, in Kentucky, July 29th.

CASE IV.—SYME'S AMPUTATION.

Mrs. F., age 51, admitted July 14th, with extensive disease of the metatarsal bones of left foot of syphilitic origin. Family history negative. Personal history—syphilis of a number of years duration. Her left eye had been lost from syphilitic inflammation. She had been at various times under anti-syphilitic treatment. System greatly broken down. On the dorsum of the left foot was a deep ill-conditioned ulcer extending from the head of the metatarsal bone to near the instep, and in width from the inner border of the foot to the center of the dorsum. The discharge from the ulcer was a thin offensive semi-purulent fluid. Pain was considerable. The probe detected dead bone in the bottom of the ulcer. The leg and foot were both considerably swollen.

After thorough preparatory treatment, consisting of iodide of potash grs. x, syrup of the iodide of iron gtt. xv, and quinine iij, three times daily, together with an occasional aperient, July 25th, the patient was etherized. With the idea of saving,

if found possible, some portion of the foot, an exploratory incision was made through the ulcer in the axis of the foot down to the bone. Complete necrosis of the first and second metatarsal bone, and an extensively diseased condition of the third was found, rendering amputation unavoidable. The tissues of the heel being healthy, Syme's amputation was selected and performed. In addition to the drainage tube, carried from one angle to the other, a second one was inserted through an opening made for the purpose in the center of the heel flap. Flaps closed with closely-applied interrupted catgut sutures. Patient rallied quickly from operation, but required the use of morphine hypodermically to relieve intense pain. Pulse and temperature normal.

July 27th. Wound dressed. Large amount of serous effusion, showing thorough drainage. Drainage tubes removed and wound irrigated and closed antiseptically. Union throughout by first intention. Slight redness at internal aspect.

July 29th. At this writing patient doing remarkably well. Pain insignificant and temperature normal. Result astonishingly good considering patient's history and condition.

FOREIGN CORRESPONDENCE.

LONDON, ENGLAND, July 26, 1891.

To the Editor:—After spending several days in seeing the extraordinary sights of this great city, I began the most interesting part of my sojourn here by calling on Mr. Thomas Bryant, well known to your readers, especially as the author of a popular text book on surgery and for his many years' service in Guy's Hospital. I found him a jolly old man, exceedingly cordial in his welcome. He expressed his intention of visiting America in September next, and made many inquiries concerning the hotels, customs, etc., of our country. He gave me his card to visit Guy's Hospital.

I next called upon Sir William McCormac, and was much impressed by his appearance. He stands about six feet four inches, rather thin, has mild blue eyes, strong but gentle face. The dignity of "Sir" sits better upon him than upon any I have seen. He received me very kindly, and gave me his card, that I might visit the museum of the Royal College of Surgeons, and invited me to visit St. Thomas' Hospital.

The following day I visited the museum of the Royal College of Surgeons, where I spent five hours looking at the beautiful anatomical preparations. All the important surgical regions were well shown. I was much interested in the collection of vesical calculi, one particularly, removed by William Cheselden in 1737. The weight of this specimen was $6\frac{1}{2}$ ounces, and its circumference 9 inches. Time consumed in the operation 30 seconds. It was contained in a silver case. Another thing that attracted my attention was the collection of cyclopean monsters—having only one eye, no nose at all, but a proboscis above the eye which a section showed to communicate by a canal with the frontal sinus. To have seen a single specimen of the kind would not have impressed me greatly, but a half-dozen, differing only in minor details, made it especially interesting.

The next day, at 2 o'clock P.M., I went to Guy's, and made diligent inquiries for a house surgeon, in order to present my

card, as Mr. Bryant had directed me, but I failed to get the satisfaction I had reason to expect. I visited the museum, however. There were many beautiful specimens in wax, especially those showing skin diseases. I met with such an indifferent reception from the house surgeons that I came away without visiting the wards. The place was not at all inviting.

I found on my return a note from Sir William McCormac inviting me to visit St. Thomas Hospital on Friday or Saturday to witness some operations by him. As to operations, I saw at Guy's an excision of the breast for scirrhus. The breast and the glands of the axilla were removed, the artery and vein both being exposed. I was rather surprised to see the surgeon stop his incision to check bleeding. This he did several times in the course of the operation. It must have required 30 minutes to remove the breast. Another surgeon, a very poor talker, excised the hip-joint, right side, the left joint having been excised a month before. He also was a slow operator, and, to my astonishment, used the carbolic spray. He used a curved knife with a lateral curve to clear the head of the bone. The third patient had been operated on before. The surgeon trephined and removed the spinous process and laminae of two vertebrae, four had been previously removed. The patient, a child eight years old, was paralyzed in the lower limbs, and had incontinence of the urine and feces. The bodies of two of the vertebrae were found to be carious. I was not very favorably impressed with the dressings employed after these operations. They made no pretense of cleaning up—just slapped the dressings on, and removed the patients. Rather a contradiction after using the carbolic spray. Perhaps they were more carefully dressed in the wards afterward. I noticed that sponges and instruments, dropped on the floor, were picked up and used again. Strange surgery in this, the home of Lister, the father of modern antiseptic surgery!

Saturday I availed myself of the kindness of Sir William McCormac, and visited St. Thomas' Hospital. It is beautifully situated on the Thames, on the Albert embankment, directly opposite the Houses of Parliament, and consists of seven buildings of similar construction, connected by arcades and surrounded by handsome grounds. I was shown up to a beautiful little amphitheatre, where an assistant showed me to a front seat. Sir William was

reading reports of cases about to be operated on. The patient was brought in already anæsthetized. Everything being in readiness, the operation proceeded. The case was one of tumor in the sheath of the rectus abdominis of the right side, just at the border of the ribs. Patient a woman about middle age. On cutting into it, it proved to be an abscess containing strumous pus which was evacuated, and some cheesy masses removed. Then it was found, as I had suspected, that the tenth rib was much necrosed. After removing this thoroughly, he packed the cavity with iodoform gauze, using iodoform very freely. When Sir William had finished the several other operations, he came up and spoke to me and invited me to visit the wards with him.

It was extremely interesting to me. A whole ward devoted entirely to excisions and amputations. I saw cases of hip, knee, elbow and wrist excisions. Sir William called my attention to a knee-joint excision which was dressed with a splint with a joint at the hip, which allowed the patient to sit up, the leg being swung in a cradle. There was a number of cases of wrist-joint excisions which had been done eight days before. My distinguished guide was very kind in pointing out everything of interest as we passed through the ward to a balcony where there was a number of convalescent sitting enjoying the cool breezes from the Thames. Here the view of the river was charming. The patients all seemed delighted to see Sir William, and he spoke kindly to each one. My host invited me to call again Wednesday, but we sail for Norway Tuesday, and had to decline. He sent his kindest regards to Dr. W. T. B. My visit to St. Thomas' Hospital was quite in contrast to that at Guy's. The whole style of everything was different. Nurses used cups to receive soiled sponges, or rather the substitutes for sponges, cotton wrapped in antiseptic gauze. Everything at St. Thomas was scrupulously clean. Sir William had excellent assistants, and they all seemed to be in love with him.

Next week we sail to Bergen, where if it is possible I shall visit the Leper Hospital, and write the JOURNAL an account of my visit in my next.

I am sorry I did not stop to call on Mr. Tait, but we passed through Birmingham without stopping. More in my next.

Very Truly,

SAM'L S. BRIGGS, M.D.

Selected Articles.

ADDRESS IN SURGERY,

Delivered at the Meeting of the British Med. Association at Bournemouth.

BY JOHN CHIENE, M.D., F.R.C.S. EDIN., F.R.S.,

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Mr. President and Gentlemen:—"There are duties difficult of fulfilment pertaining to every position in life, and there are duties attached to public professional life from which no man can assume to himself the right to shrink, with whatever diffidence and incapacity they may be undertaken." These are the opening words in one of my favorite books, and they express my feelings so well to-day that I do not hesitate to adopt them. Some years ago a friend of mine was sitting in the Surgical Section at a British Medical Association meeting. He overheard a conversation near him. "Who is that sitting at the table?" said one, pointing to an office-bearer. The answer was, "I do not know him, but he must be a wise man—he has never opened his mouth since I entered the room." The person under discussion was then secretary of the Surgical Section; he now occupies a more important position, and his first thought this afternoon in addressing you is that he is throwing away his best chance of being considered a wise man. The silent people of this world as a rule have the best of it; but silence is not permissible to me to-day. In the Address on Surgery I come before you with a free hand. The burden that is upon me is by no means lessened by the thought that the invitation is mainly intended as a compliment to the school with which

I am proud to be connected, and many of my audience, who are Edinburgh men, hope that, speaking in the name of the school, I will not speak unworthily. The mode, the method, and the subject lie solely with me, and I trust I have not erred in the choice that I have made. Since my student days the importance of principles has ever been before me, due, as every old Edinburgh student in the sixties will acknowledge, mainly to the teaching of Goodsir and Syme. Since my student days, when Carlyle was our rector, hero worship has been to me an incentive and an encouragement. My hero for to-day, whom I never saw, but whose one great work has been to me a classic, taught me to value a great principle, and I cannot but think that those present who knew him personally, who worked with him, and were taught by him, and the great idea which he loved to inculcate, as my mainstay to-day, I am leaning on a strong staff, and that it will be entirely my own fault if I do not make the subject an interesting one. To those present who knew him not—there are not many present who do not know his work—it is an absolute pleasure to me to be the imperfect medium of an introduction. My hero is John Hilton, and my principle is *rest as a therapeutical agent in the cure of surgical ailments*.

Judging from the catalogue of Hilton's writings given in the great "Medical Dictionary," which we owe mainly to the untiring energy of a not infrequent visitor at these meetings, Dr. J. S. Billings, of Washington, John Hilton must have been a silent man. Apart from those who were his immediate pupils, he seems to have given others only two opportunities of judging of his worth. On both occasions—thanks to the Royal College of Surgeons of England, who called on him to give the Hunterian address in 1867, and to deliver the lectures at the College in 1861, 1862 and 1863—he was pushed into positions which compelled him to put his ideas in print. It is to these lectures I owe so much, and my obligations are so great that I am compelled to embrace this opportunity of inculcating Hilton's great idea of the value of rest in surgical practice. I read the book by Mr. Joseph Bell's advice in my student's days, and after I became a teacher in surgery I again renewed my interest in it, from reading a short paper by that master in surgery, Sir James Paget, who gave his own personal experience of the value of Hilton's method of open-

ing an abscess. I have ever since given Hilton a principal place among my teachers. I have made constant reference to his worth in my daily work as a teacher, and recommended all my students to make part of themselves the great principles with which Hilton's name is so honorably associated. Bacon says there are books to skim over, books to read parts of, books to absorb. Hilton's book on "Rest and Pain" is one to absorb. Since Hilton's time—born in Essex in 1804, died in 1878—many changes have taken place in the practice of surgery. I ask, and I wish to try to answer the question, What bearing has Hilton's main idea—good for all time—on our present work as surgeons? While I gladly grant that in this audience there are those who could, from more extensive knowledge, bring Hilton more vividly before you, yet I will yield to no one in my intense admiration for the man and for the principle.

In estimating the impression which Hilton's book has made on my mind, and the effect it has had on my teaching and practice, it is very evident that I must draw largely for my illustrations upon my personal work; and, if I choose simple things, I have a predecessor—Mr. Teal of Leeds—an example of a surgeon who took in great part the simples as the subject of, in my opinion, one of the most interesting addresses in surgery recently delivered to this Association. I will not only speak of things which illustrate the value of rest, but of things which cause unrest, the removal of which is the main aim of the surgeon. I am not going to attempt to define rest or its opposite—unrest. There is always some molecular movement going on during life; a part can never be in a state of absolute rest. The term must always be a relative one. It has been divided into mechanical and physiological, but this division is a purely arbitrary one. It has, however, a mental and a bodily aspect—a psychical and a physical side; and without further preface I will take up first the mental, and afterwards the bodily, aspects of rest and unrest. I estimate year by year more highly the mental aspects of rest. The late Mr. Goodsir divided physiology into two divisions, anatomical and psychological, and in his graduation address in 1859 he laid down this axiom, "that the greater liability of man to disease is intimately related to his higher conscious intelligence." He also says "that in the treatment of disease the adjustment may require to be, and in gen-

eral must be, directed more or less to the psychical as well as to the physical conditions of the case."

We all know it is not work, but worry—mental unrest—which kills; so a person will bear much physical discomfort in order that he may be relieved of the mental discomfort of his condition. I take into consideration in my practice and in my operations the effect that my decision in recommending any special treatment will have on the mind of my patient. In operations for cancer we all know how frequently they are unsatisfactory; but I think we hardly estimate the great mental depression which often follows on our refusal to attempt to give relief, more especially after the recurrence of the disease—after primary operation has taken place. An attempt—even if unsuccessful—to remove the tumor will often give the patient a feeling of mental rest in the very thought that no stone has been left unturned in the endeavor to give relief. I desire as far as I can to give my patient mental rest, and for this reason I am often impelled to make the endeavor by operative means to give that relief which, looked on simply from the physical side, it may be impossible to underestimate; but, looked at from the psychical side, it may be impossible to overestimate. For example, there is a class of cases which I have sometimes termed the "phobies"—syphilophobia, cancerophobia—in which the whole disease is psychic, and I know no condition in which I have more pleasure in giving relief, because the condition of these patients is a most unhappy one. There is one aspect of the mental side of disease which has, in my opinion, not received the attention which it deserves. When a patient is confined to his bed, away from his work, he is often suffering as much from the worry of mental inactivity as from the physical disease for which he is under treatment. I feel sure that the prescription "Do not worry" might with advantage be burnt, and that "Do some work" should take its place. I have seen patients suffering from aneurysm who have shown decided improvement by encouraging them to do some light mental work.

This is an age of diagnostic incisions on the part of surgeons, and faith on the part of patients that, after the incision has been made and the part thoroughly examined, the surgeon will have more light and be best able to judge as to what should be done. Thé patient may come out of the anæsthetic minus a limb, but he

will feel that it was taken off after the most careful examination, and the fullest possible light had been thrown on the diseased area by free diagnostic incisions. One is reminded in this connexion of a song by Sir Douglas Maclagan, the Nestor of Medicine in the capital of the north.

Case Second. An unhealthy lad
To Duncan's ward came in, Sir,
'And showed to him a shocking bad
Affair upon his shin, Sir,
Says Duncan, twirling of his probe,
I fear that this won't cobble;
'Twill never make a decent job,
And all your life you'll hobble.
He gave the ether. Off the leg
Was snipped before their noses!
Chap woke and found a wooden peg
Where there had been necrosis.

The limb at that time was taken off because the surgeon said it should come off; now a limb is taken off because the surgeon feels and sees physically, not psychically, that it must come off. In diagnostic incisions I believe we have a valuable aid in avoiding psychical unrest. These diagnostic incisions are the direct outcome of the minimised danger of such incisions. A new diagnostic power has been placed in our hands. The first step in the operation is the diagnosis, and the surgeon has no hesitation in taking this step. He requires from his patient a free hand; he takes less on faith and more on sight. He avoids the necessity and uncertainty of guessing, which, perhaps, gave to the surgery of the past much of that something which made great diagnostic surgeons; but we must remember that this diagnostic power was the direct outcome of an experience largely founded on mistaken diagnosis. The present method trains the ready surgeon, and is, in my opinion, the method which best attains the object desired—namely, that the best is done for the patient.

I need not dwell on anæsthesia as a cause of rest in our patients, except to say that I still adhere to the views I expressed in a paper on Chloroform, read at the Cardiff meeting in 1885. I still hold that chloroform is the best anæsthetic; and I cannot help, as a pupil of Syme, feeling pride that the decision of the Hyderabad Commission, presided over by Dr. Lauder Brunton, so fully bears

out the views held by that far-seeing man. Cocaine as a local anæsthetic is in my opinion of great value in adults. I have never seen any of the evil results, local or general, which have been described. We must take care to use a pure solution, and see that we do not inject it directly into a vein. These are the precautions which I have taken; and I use it either as a solution of salicylate of cocaine, or kept in pellets, and dissolved when required in camphor water or distilled water. I never inject more than half a grain. In the passage of bougies, in phimosis, in tracheotomy, in fissure, and in simple cases of fistula in ano, in excision of tonsils, before injecting iodine into a hydrocele, in small wounds before stitching, I have found the drug valuable. I allow four minutes to elapse after injection before performing the operation. To prevent urethral fever—a purely nervous lesion—before passing an instrument I have used it in the form of a cocaine bougie. It is right to say that the use of local anæsthetics, such as cocaine, ether, or chloride of ethyl, may be overdone. The work of the surgeon may require to be done in too hurried a manner, not altogether satisfactory either to the patient or to the surgeon. Mental unrest, arising from a feeling of work imperfectly done, worries the surgeon; and in any operation requiring time chloroform is to be preferred to the local anæsthetic.

Pain given to a patient whether in the dressing of a wound or in the examination necessary to make a diagnosis, is a most fertile cause of unrest. Confidence is lost between patient and surgeon; this is more especially true in children. When I hurt a patient I always feel I am doing or have done wrong. Healthy wounds are not painful. The healing of a wound is a physiological process closely allied to—in fact, it is—growth. Inflammation in our wounds can be avoided, then pain as a cause of unrest is unknown. Pain is to be avoided by every means in our power. Any movement of the patient is apt to cause pain, and every endeavor should be made in the examination of the patient to avoid pain. Also in the dressing of the wound the avoidance of movement is all-important, and in this connexion I can speak very confidently of the value of the many-tailed bandage. The wound can be exposed without moving the limb. It is spiral; it can, however, be arranged as a spica, or figure-of-8 bandage; any portion or the body can be covered with a many-tailed bandage.

It always reminds me of the main characteristic of the British army: each turn working well in unison with the neighboring turns, and each turn having an independent power in itself. For "turn" read "soldier." In fracture of the pelvis it is infinitely preferable to a roller bandage; it can be tightened and loosened without moving the patient.

One of the most frequent causes of unrest in wounds, and the free serous oozing which accompanies it, is the use of unnecessarily strong antiseptics. We cannot avoid them altogether. We must use them in a thorough manner for the purification of our hands, of the skin of our patients, and for our instruments if we have not a sterilising apparatus; but as regards the wound itself, given an aseptic wound to begin with, the less of the antiseptic the better, it is an irritant. A good many years ago a smart writer in a medical journal said, "Lister's arguments are getting stronger, his solutions are getting weaker." If he had said, "His arguments are getting stronger because his solutions are getting weaker," he would have been nearer the truth. Asepticism is taking the place of antisepticism. The extent to which this this can be carried out will depend on the security we feel when we operate on unbroken skin that we have not introduced any causes of fermentation. If we have not this security, we must wash out our wound, after stitching, with an antiseptic, but let it be followed by an aseptic fluid in order to remove the antiseptic—the irritant; or at any rate see that no antiseptic is left in the wound. It has ever to be borne in mind—and this renders the work of the surgeon a more responsible one—that the main danger of contamination is from what is directly put into the wound, rather than from what *falls* into the wound. I am not prepared to allow that a wound is never contaminated from the air, but I am prepared to acknowledge that dirty skin, dirty instruments, and dirty hands are the main factors which cause fermentation in our wounds. In an investigation recently conducted in my wards by Dr. Hutton, fifteen different organisms have been found in the air; most of these are undoubtedly innocuous, but some may be hurtful. Never use a sponge twice in an operation, or better still, never use a sponge at all; gauze which has been boiled and then placed in a weak corrosive lotion is better than any sponge.

Another aspect of Hiltonism is the use of an absorbable drain,

so that dressing of the wound is not required in order to remove the drain. Pressure and careful apposition of the edges and surfaces, combined with the absence of any irritating antiseptic, have to a great extent done away with drainage of any sort; but here I think I have overshot the mark, because if any bleeding occurs, and if the pressure is not accurate, accumulation of blood takes place, and delayed healing is the result. This has lately been one of my main troubles in wounds, and I recall three cases of excision of the mamma within the year in which this has occurred and delayed union. I think the safer plan is drainage for twenty-four hours during the time when reactionary hæmorrhage is likely to happen. If indiarubber tubing is used it can be arranged so that it can be removed without disturbance or exposure of the wound; cause the tube to project beyond the wound surface, then the blood and serous discharge pass into the substance of the dressing, and have no tendency to pass along the skin surface to the edge of the dressing. Free evaporation through the dressing is all-important. Dr. Werne Clarke has recently brought under my notice a corrosive dressing, in which the outer layer is impermeable to liquids, although it allows of free evaporation. This dressing is made by Robinson and Co. (Chesterfield), and from the trial which I have made of it I think it will take a place in surgical practice. Free drainage and its accompaniment, rest, are best attained in psoas abscess by a posterior opening at the lowest point of the abscess cavity (patient recumbent), in the angle between the outer edge of the erector spinæ and the crest of the ilium. From this opening we can sometimes reach the diseased area in the bodies of the vertebræ and remove necrosed fragments of the bone. So also in retro-pharyngeal abscess; an opening posterior to the sterno-mastoid muscle acts in the same way. In both of these forms of abscess the aseptic management of the case is more easily carried out than when the opening is anterior. I have followed this method of treatment since 1876 and beg to recommend it to the profession.

Use leaden splints to steady limbs after amputation and excision. Shape the splints so that it can be unfolded without moving the limb. Anchor the arm by the side with a leaden splint after excision of the mamma. Apply your pressure firmly, but always leave a distal portion of the limb exposed, so that, if it swells,

then the pressure is overdone and the bandages must be loosened. We know pressure is properly applied to any part if it fulfils two conditions: painlessness and non-interference with the blood current through the part. Horsehair stitches are valuable, combining rigidity and elasticity—rigidity acting as a splint steadying the edges, elasticity enabling them when cut to be removed without pain. After cutting a stitch, lay hold of the knot and pull towards the side on which the loop has been cut; in this way all strain on the edges of the wound is avoided. A plaster applied over a boil in its earlier stages acts as a splint, steadies the part, and relieves pain. The boil is frequently aborted by this simple means.

These, gentlemen, are simple things, and I feel as I write that I owe an apology for their simplicity. They are, however, all illustrations of the effect which Hilton's work has made on my practice, and I hope they will be pardoned.

The value of extension in the treatment of fractures of the lower extremity or after excision of the knee and elbow is universally acknowledged. In fractures, injuries, and diseases of the spine, in sacro-iliac disease, and in fractures of the pelvis, the use of double extension is also of undoubted value. I have used it since 1877 in these conditions, and I can recommend it with confidence. It may be used in three ways: (1) The patient horizontal, and a weight applied to the limbs, with a counter-extending weight to the head; (2) the head of the bed raised, a weight to the head, and the body acting as the counter-extending force; (3) the foot of the bed raised, a weight applied to the limbs, and the weight of the body acting as the counter-extending force. It is most valuable in the mobile portions of the spine—the cervical and lumbar regions. In dorsal disease the first method is mainly used. In cervical disease the second method is used; in lumbar disease, in sacro-iliac disease, and in fractures of the pelvis, use the third method. As the pain subsides, rotation must be prevented by the double long splint when the disease involves the lumbar, dorsal, and pelvic segments. In the cervical region fix the head with a hollowed sand pillow, or with a poroplastic splint, or with Fleming's india-rubber collar. Treves has demonstrated the value of rest in enlargement of the lymphatic glands in the neck by a similar contrivance.

In all cases in which complete rest of the trunk is called for, use a thick and firm mattress made in three pieces, the central portion of which can be withdrawn for the performance of the acts of defecation in both sexes, and the act of urination in the female. The prevention of bedsores by the facility with which the sacrum and buttocks can be examined, and the dressing of these sores, when they do occur, are greatly facilitated by the triple mattress. In the diagnosis of injuries in the region of the hip, the use of Nélaton's line, has been given up in my practice, because in order to reach the ischial tuberosity necessary for estimating the line, the patient has to be moved. Its place is taken by noting the want of parallelism between two tapes, one passing through the anterior superior spinous processes, and the other through the tips of the great trochanters of the femur.

On the arrest of hemorrhage we have a valuable paper by Dr. Milne Murray in the *Edinburgh Medical Journal* of August and September, 1886, on the explanation of the action of hot water, which well illustrates rest. He shows that the general shock and the local reaction are greatly lessened after using hot water, as compared with the former method by means of cold. In epistaxis prevent the air passing through the nasal cavity by tightly grasping the nose, and the epistaxis will frequently cease, the part being kept at rest.

In cranial surgery, in the curved incision, as suggested by Mr. Victor Horsely, we have the means of restoring a flap to cover and give support to the denuded brain tissue or dura mater. In intracranial hemorrhage, intradural and extradural, we now feel justified in cutting down and arresting hemorrhage by ligature, or by the hot douche, and from one case in which I operated on a person, comatose, with Cheyne-Stokes respiration, and a pulse of 40 to the minute and on the point of death, I feel justified in recommending that, in apoplexy, an opening into the cranial and dural box is a justifiable surgical procedure, giving rest by relieving tension. This patient was shown by Dr. Smart at the Medico-Chirurgical Society of Edinburgh in June of this year.

In spasmodic wryneck we have the patient in constant unrest. What relief is given by excision of a portion of the spinal accessory nerve? In March, 1881, I showed a case at the Medico-Chirurgical Society of Edinburgh. From the result in that pa-

tient, and from similar cases which I have seen since 1881, I think the operation well worthy of more extended trial.

In rectal surgery gradual dilatation of the sphincter and before operations gives rest after the operation, as it is followed by a temporary paresis. In colotomy the inguinal region is preferable to the lumbar, because mental worry is avoided by making an artificial anus in a situation which the patient himself has under command. In lumbar colotomy the cul-de-sac between the rectal stricture and the opening in the colon fills with feces and causes unrest. In inguinal colotomy, if the opening is intended to be a permanent one, I bring the whole lumen of the sigmoid flexure out as a loop through the wound in the wall, and fixed there with long pins passed through the abdomen wall, bringing the parietal peritoneum in contact with the visceral peritoneum. Stitches are a source of unrest; simple apposition is all that is necessary to obtain firm union.

In the ligation of internal piles the division of the mucous membrane at the anus with scissors before transfixion and ligation, and tying the ligation tightly, so as completely to strangulate the pile, are both means which diminish pain after the operation. The pile mass dies without any inflammation, it dies of dry painless gangrene. If this had been more frequently attended to, we should have heard less of other methods of treating internal piles. While I say this, I desire most emphatically to express my complete accordance with Whitehead's view, that in cases in which the whole circumference of the gut is effected, excision is the most thorough and satisfactory method of treatment.

There is no organ in which the value of rest is better illustrated than in the bladder. In disease its systole and diastole can be checked in different ways, and the cystitis caused by the unrest, as evidenced by frequency of micturition, is relieved. This can be done by fixing a gum elastic catheter in the bladder, taking care that the eye of the instrument is just within the cavity, and attaching to the catheter an indiarubber tube, which passes into a vessel at the side of the bed. In 1876 I showed that if the tube passes under water, and if the instrument and tube are full of fluid, there will be, by the syphon action of the arrangement, if the water in the vessel is at a lower level than the bladder, a head of water, which, by its suction, will remove the water from the

bladder as it passes from the ureters. The amount of suction will depend on the difference of level, and I have found by experience that a foot of fall is generally sufficient to keep the bladder empty. If the fall is greater, then the mucous membrane is apt to be sucked into the eye of the instrument, and a block takes place, the bladder filling with urine. When this happens pain will at once be felt by the patient; in fact his sensations are the best guide to the height at which the vessel at the side of the bed should be placed. By this simple means we can give the bladder rest. In external division of stricture of the urethra the same means can be used to keep the wound absolutely dry and facilitate healing. We can also rest the bladder by perineal or by supra-pubic cystotomy. In either case the bladder collapses and the viscus gets rest. In intractable cases of cystitis in the female the supra-pubic opening deserves further trial. In connexion with the bladder, may I remind those present of the debt we owe to Bigelow for showing us that the unrest after lithotripsy is due to fragments of stone left in the bladder after crushing, and how important it is to crush and remove entirely all the fragments at one operation?

In hemorrhage from the bladder or prostate a supra-pubic opening arrests the hemorrhage, the cause of which is the contractions of the bladder, which at once ceases when the bladder is opened. The hemorrhage during the operation may be checked by the use of the hot douche. In vesical hemorrhage the mere washing out of the bladder with hot boracic lotion often checks the bleeding—in fact, hemorrhage from any cavity is most easily and satisfactorily checked by the hot douche. In tracheotomy, Hilton points out the value of rest to the inflamed larynx. One of the main objects of the surgeon is to prevent any blood getting into the trachea, and thence into the lungs, where it is the most fertile source of unrest, setting up pneumonia, the common cause of death after tracheotomy, when the death is not due to the disease for which the operation was performed. In the treatment of cut throat, if we perform tracheotomy at once, and accurately unite the wounded surfaces, we attain more rapid healing, because the wound is not used as a funnel through which the air is admitted to the lungs. Movement of the parts is reduced to a minimum—the part, in fact, is kept in a state of rest, encouraging and facili-

tating healing. In the application of a bandage to varicose veins. Let us see that it is applied before the patient gets out of bed; so also in the application of a truss in hernia the same rule must be constantly followed. Allow the veins to fill or the hernia to come down once in twelve hours, and the bandage or truss ceases to act as a curative, and only acts as a palliative agent. We allow, by the vein filling or the hernia coming down, a temporary unrest which does away with the good of the previous twelve hours' support of the retentive apparatus. It is well to note that continuous gentle elastic pressure will often act most efficiently, painlessly, and restfully in reducing an irreducible hernia, a prolapse of the rectum, or a paraphimosis.

I might multiply examples, but I have given enough to illustrate my subject. I have endeavored to expound the healing doctrine of rest. It has been my privilege to point to John Hilton as one of the great expounders, who has, more than anyone else, impressed me with its value in surgery. I am anxious that anything I may have said will in no way interfere with the necessity, for those who have not done so, of a careful perusal of his work. You will not agree with many things he says. Take comfort in the thought that it must be a poor book with which you are entirely in agreement; its stimulating effect on you will be absent. After you have read the book you will grant that in him we have a careful observer and a conscientious worker, and one whose methods we will do well to imitate.

Before I conclude I would wish it to be understood that there is another side to this picture, or perhaps it may be the same picture looked at from a different standpoint. It is that much harm may be done by too excessive attention to rest. Evil may result from too prolonged rest. Mechanical rest may, in one sense, be antagonistic to physiological rest. Mechanical rest, in many cases, must be interfered with in order to attain physiological rest. An example will best show my meaning. Immediately after an injury the effusions into the tissues may, by their presence, interfere with the normal blood current through the part. At a later date these effusions are replaced by organized material which will also act in the same way. The nerve equilibrium will also be altered. The part will then be, from the vascular and nervous side, in a state of physiological unrest, and this unrest will be intensified by pro-

longed mechanical rest, because, unless there is a normal blood current, the effusion and fibrous material will not be removed. It is therefore necessary that, while we maintain mechanical rest after a part is injured, we should at the same time adopt some means to remove these products. It is here that massage is so valuable; lightly applied, it has a marked soothing influence on the nerve disturbance; more strongly, though still gently applied, it will get rid of the effusions by causing a temporary congestion and free flow of blood through the part; still more strongly applied, it breaks down fibrous adhesions and gets rid of the pain felt in certain movements of the limb. While the massage interferes with the mechanical rest, it acts directly in relieving the physiological unrest. Experience alone will tell how far we can go with massage in order to attain the one object—the physiological rest—while at the same time we avoid doing harm by its over-use by interfering with the mechanical rest. In acute sprains and strains it may be begun at once, gently night and morning, using elastic pressure with wadding and a flannel bandage in the intervals of the massage. In subacute cases it may be used more freely, wearing an elastic bandage in the intervals, along with limited use of the injured limb. In chronic cases, which are non-tuberculous, adhesions may be freely broken down, often giving immediate relief after months of partial impairment of usefulness.

I am also strongly of opinion that in fractures near joints, as in Colles' and Pott's fracture, massage may with advantage be begun within a week, with the result that while the repair of the broken bone is in no way interfered with (I rather think it is aided), the limb is a useful one at a much earlier period than is the case if, as in the orthodox treatment, the limb is kept absolutely quiet for three or four weeks. If we think only of the broken bone and forget the injury to the surrounding soft parts, the result is a stiff and useless limb, which will for a long time be a source of discomfort and helplessness to the individual. It is a question exercising my mind whether we should not apply gentle massage in all fractures, as a matter of routine practice, so long as we can do so without displacing or causing movement between the broken fragments of the bone. The use of extension during the massage applied to the limb beyond renders this method much more feasible than it formerly was when we depended entirely upon splints applied at the

seat of fracture commanding the joints above and below. It is interesting to note in this connexion that no fractures heal more kindly and quickly than broken ribs, in which it may truly be said that during the whole process of cure the act of breathing is keeping up a constant gentle movement, a nature's massage, which in no way interferes with the union of the broken bone.

In breaking down adhesions in old-standing cases of fracture, sprain, or strain, one must act in a decided manner. Their presence is associated with limited movement, pain on movement or pain on pressure, and the use of firmly applied rotatory massage, or the sudden stretching of the tissues which are matted together, often gives immediate and lasting relief.

In the case of nerve-stretching in sciatica the cases which are benefitted are, in my opinion, those which may be called trade sciaticas, due to some special trade pressing on and irritating the sciatic nerve. You freely stretch the nerve, but do not interfere in any way with the sensory and motor functions, and the pain is relieved by breaking down the fibrous adhesions in the nerve sheath and among the nerve fibrils. May I say in passing that the operation is sometimes a source of psychical unrest to the operating surgeon if he does not easily find the nerve. This unrest is avoided if, in operating, the patient lying on his face, the surgeon will stand on the opposite side to the limb to be operated upon. If he then makes an incision over the nerve at the lower border of the gluteus maximus large enough to enable him to introduce his forefinger, which, using as a hook, he draws towards the middle line of the patient, he will at once find the nerve lying external to the muscles arising from the tuber ischii.

New lamps have been expected of me to-day; if so, my hearers have been disappointed. "Let us make a stand on the ancient ways, and then look about us and discover what is the right and straight way, and so walk in it." Bacon was fond of quoting this passage, and it has been my motto. I have taken my stand on an ancient way; I have tried to polish and refill the old lamp.

James Hinton, another of my heroes, in one of his letters, writes; "Let me advise just once. I do not like an adviser much; but just this one thing—be reverent where you are ignorant, and attach no weight at all to your naturally feeling sure. We al-

most always feel sure wrongly—it is our own fate, it is our very being.” The speaker to-day may be too sure, and may place too much reliance on rest as the most powerful therapeutic agent in surgical practice, but he can assure you that he has had Hinton’s words constantly in his mind as he spoke, and what he has said is offered to this audience in the same spirit in which they were written by that philosophic surgeon. I began with a sentence from Hilton; I end with one from Hinton. These men had something in common. Hilton taught rest; Hinton sought it. In one of his last letters he writes these sad words: “I have tried for too much, and failed; but yet, perhaps, in that my failure God is giving me more than I even tried for. He has opened my eyes, at least a little, though I am blind and foolish still, no doubt. I will try and be wiser, and look more, and care more what others feel.” Strange words from one who spent his whole life for the good of others.

At a time fertile in unrest in religion, politics, and surgery, in the country in which Gilbert White spent his days, in the country in which he wrote one of the most restful—I had almost said *the* most restful—book I know, rest as a thesis is perhaps not altogether out of place, especially when I remember that to many of us this meeting is our annual holiday, our resting stage; and still more especially when I remember that we are enjoying the generous hospitality of the inhabitants of one of the main resting places in this country, where so many get that rest which enables them to go back to work with energies renewed and restored by the fresh air and restfulness one of the most attractive rest resorts in Great Britain.—*The Lancet*.

Editorials, Reviews, Etc.

PUBLISHER'S NOTICE.—The JOURNAL is published in monthly numbers of *Forty-eight pages*, at one dollar a year, to be always paid in advance.

All bills for advertisements to be paid quarterly, after the first insertion of the quarter.

Business communications, remittances by mail, either by money-order, draft, or registered letter, should be sent to the Editor, C. S. BRIGGS, M. D., Cor. Sumner and Union Streets, Nashville, Tenn.

All communications for the JOURNAL, books for review, exchanges, etc., should be addressed to the Editor.

OPENING OF THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF NASHVILLE AND OF VANDERBILT UNIVERSITY.

September 1st the preliminary course of lectures in the above-named institution commences. All indications point to a large class. Already a number of students have arrived in the city, ready and anxious to avail themselves of the advantages of the month's preliminary course. It is fully expected that over one hundred students will be in attendance on the first day, which gives promise of over three hundred in the regular course.

Dissecting and clinical lectures form the principal features of attraction for this part of the term, and students do well to avail themselves of the opportunity. The clinics held at this school are always numerous and interesting. In addition to the large number of cases brought before the class by each professor from his private practice, the college shares with other medical colleges of the city the clinical material furnished by the new City Hospital. Three clinical lectures are delivered a week at the

City Hospital by teachers of this college every other month. The City Hospital, therefore, furnishes ample clinical material for students of this school. In addition, clinics are held regularly in the college amphitheatre from material furnished by the Medical College Infirmary, an institution belonging exclusively to this college, and supplied with patients who come from a distance for special treatment. It will thus be seen that with two hospitals to draw from, the City Hospital and the Medical College Infirmary, together with the numerous cases furnished by the private practice of individual professors, the course will be amply illustrated by clinical teaching.

The teaching facilities of the Medical Department of the Nashville and Vanderbilt, both clinical and didactic, are unsurpassed by any school in the South or Southwest. The faculty is composed of men well known everywhere in their several departments. The museum is celebrated for its completeness. The chemical laboratory is complete in its appointments. The newly established microscopic laboratory is an attractive feature; and the dissecting room is well supplied with material, and presided over by three competent and attentive demonstrators, all of which combined go to make up a thorough school.

DRS. W. T. & C. S. BRIGGS' SURGICAL INFIRMARY.

The new and handsome residence on the corner of South College and Peabody Streets, just opposite the college building, has been leased for a number of years, and fitted up as a private infirmary for the treatment of surgical, gynecological and chronic diseases by the above named. No expense has been spared to make this an elegant home for such patients as may come to the city for treatment. Special attention has been devoted to fitting up the operating room, so that operations will be conducted under

the most favorable antiseptic surroundings. The floor is laid in adamant stone, and the ceiling and walls plastered with adamant plaster, so that the entire room can be flushed thoroughly clean after every operation. The room is excellently lighted by both side and sky lights. The furniture for the room has been selected with a special view to carrying out the details of aseptic surgery. The entire building has been equipped in such a way as to make it attractive as well as comfortable. Electric bells and electric lighting are in every room. The building is heated by steam, and the rooms, large and commodious, are provided with well-selected furniture. The Infirmary will be ready for the reception of patients September 15th.

TRI-STATE MEDICAL ASSOCIATION OF GEORGIA, ALABAMA AND TENNESSEE.

The third annual meeting of this Association will be held in Chattanooga, October 27th, 28th, and 29th. The distinguished Dr. Robert Battey, of Rome, Ga., will preside at the forthcoming meeting, which, judging from the appended list of promised papers, will be a very interesting meeting.

PAPERS TO BE READ :

Ovariectomy; its Use and Abuse, Robert Battey, M. D., Rome, Georgia.

Physiological Functions of the Nose; A. B. Thrasher, M. D., Cincinnati, Ohio.

Typhoid Fever Complicated with Pregnancy—a Case; Andrew Boyd, M. D., Scottsboro, Alabama.

The Cure of Pulmonary Tuberculosis; Carl von Ruck, M. D., Ashville, North Carolina.

Intubation and Tracheotomy; Gilbert I. Cullen, M. D., Cincinnati, Ohio.

Oxygen Gas and Creosoted Oil in the Treatment of Phthisic, with report of Case; Junius F. Lynch, M. D., Sanford, Florida.

An Entirely New and Successful Treatment of Gonorrhœa and its Sequences; George Wylie Broome, M. D., St. Louis, Mo.

The Physiology and Chemistry of Therapeutics; G. W. Drake, M. D., Chattanooga, Tennessee.

Angina Pectoris; W. C. Towns, M. D., Chattanooga, Tenn.

Report of a Case of Neuromimetic Trouble; E. E. Kerr, M. D., Chattanooga, Tennessee.

Report of a Case of Epilepsy Cured by Operations on the Eye; H. Crumley, M. D., and Frank Trester Smith, M. D., Chattanooga, Tennessee.

Evolution from a Scientific Standpoint; J. P. Stewart, M. D., Attalla, Alabama.

The hard-worked members of the profession who want to get away from home, and take their wives and families with them for a few days of rest, should prepare themselves to attend the annual meeting of the Mississippi Valley Medical Association in St. Louis, Mo., October 14th, 15th, and 16th. The daylight hours during the sessions of the convention will be given up to the consideration of science, the reading and discussion of papers (remember, no ethical or other extraordinary business, such as medical education, will be discussed), the report of interesting cases, and the best means of curing the doctor's patients, will be the exclusive topics considered.

The place of meeting will be the Pickwick Theatre, Washington and Jefferson Avenue. The evenings will be given up to enjoyment, and every visitor will be made to have a good time. Every doctor in the Mississippi Valley, and the country at large, in sympathy with the American Medical Association, and the advancement of science, is invited to come to the meeting in St.

Louis, and bring his family with him. Dr. I. N. Love, St. Louis, Mo., is the jolly chairman of the Committee of Arrangements.

Membership in the American Medical Association is obtainable at any time by a member of any State or local medical society which is entitled to send delegates to the Association. All that is necessary is for the applicant to write to the Treasurer of the Association, Dr. Richard J. Dunglison, Lock Box 1274, Philadelphia, Pa., sending him a certificate or statement that he is in good standing in his own Society, signed by the President and Secretary of said Society, with five dollars for annual dues. Attendance as a delegate at an annual meeting of the Association is not necessary in order to obtain membership. On receipt of the above amount the weekly Journal of the Association will be forwarded regularly.

As an apology for omitting from this number of the JOURNAL the usual extracts and book notices, we have to plead the excellence of the selected article—the address on surgical rest, delivered by John Chiene, M.D., F.R.S., at the recent meeting of the British Medical Association.

We congratulate the enterprising editor of the *New England Medical Monthly* upon the magnificent souvenir edition just received. It is a monument to the energy and push of the accomplished editor.

Dr. W. T. Briggs, who has been seriously ill from a large carbuncle upon the back, is sufficiently recovered to be out again.

John Muir, M.D., Member College Physicians and Surgeons, Ontario, Canada, Ex-Vice-President Ontario Medical Council, says:

“ I take pleasure in saying that I have found PAPINE (Battle) prompt, efficacious, and—better still—unobjectionable as to after effects. A patient, more than usually intolerant of other preparations of opium, has borne it well, and derived manifest benefit from its use.”

PIERREPONT MONOR, N. Y.

BOOKS NOTICES.

INTERNATIONAL CLINICS: a Quarterly of Clinical Lectures on Medicine, Surgery, Gynæcology, Pediatrics, Neurology, Laryngology, Ophthalmology, and Otology, by Professors and Lecturers in the leading Medical Colleges of the United States, Great Britain, and Canada. Edited by JOHN M. KEATING, M.D., Philadelphia, Consulting Physician for Diseases of Women to St. Agnes' Hospital, Philadelphia; Editor "Cyclopedia of the Diseases of Children," J. P. CROZER GRIFFITH, D.M., Philadelphia, Professor of Clinical Medicine in The Philadelphia Polyclinic. J. MITCHELL BRUCE, M.D., F.R.C.P., London, England, Physician and Lecturer on Therapeutics at the Charing Cross Hospital. DAVID W. FINLAY, M.D., F.R.C.P., London, England, Lecturer on Clinical Medicine, Middlesex Hospital Medical School; Physician to the Royal Hospital for Diseases of the Chest, and to Middlesex Hospital. April, 1891. Philadelphia. J. B. LIPPINCOTT Co. 1891.

This is the first volume of a quarterly publication, the design of which is to furnish in periodical form a complete course of post-graduate instruction. We know of no medical literary venture which is so well calculated to fill a growing want. Clinical lectures, carefully revised and prepared, delivered by the best-known clinical lecturers of the world, will be presented in quarterly form. If the present volume is an earnest of what is to come no physician can afford to be without the course. Among the subjects furnished in this volume may be mentioned the following: "Acromegaly," "Angina Ludovici in its Relations to Diphtheria," "Sore Throat," "Modern Methods in Surgical Operations," "Ulcers," "Cancers of the Penis," Chorea, "Alcoholic Paraly-

sis," and a great many others. The lecturers upon these and other subjects are all well known as leading clinical teachers in this and the old country. Our readers can readily see that by recourse to such works they have access to what is furnished neither in the circulating periodicals nor in the standard text-books.

COLLECTED CONTRIBUTIONS OF DIGESTION AND DIET. By SIR WILLIAM ROBERTS, M.D., F.R.S., formerly Physician to the Manchester Royal Infirmary, and Professor of Medicine in the Victoria University. Lea Brothers & Co., Philadelphia. 1891.

This volume presents to the profession a number of contributions on subjects that always interests the physician. It is the work of an author favorably known to the profession. The work is a useful contribution to medical literature, and contains much that is new and useful.

ORIGIN, PURPOSE, AND DESTINY OF MAN, or Philosophy of the Three Ethers. By WILLIAM THORNTON. Boston. 1891. Published by the Author.

The title of this brochure goes far to indicate the nature of the work. The author is striving at something unattainable, it appears to us, when he tries to revolutionize the present system of medicine. The work is well written and has the impress throughout of a scholar's hand. It certainly proves interesting in the respect that its contents are far from the beaten track of medical writers, and in some respects may be regarded as a work of curiosity.

PRACTICAL POINTS IN THE MANAGEMENT OF SOME DISEASES IN CHILDREN. By I. N. LOVE, M.D., President American Medical Editors' Association (1890); President Pediatric Section of American Medical Association (1890); President Mississippi Valley Medical Association (1887); Secretary Pediatric Section Ninth International Medical College; Member American Pediatric Society; Member Board of Trustees of American Medical Association Journal; Professor Diseases of Children, Clinical Medicine and Hygiene, Marion-Sims College of Medicine, St. Louis; Consulting Physician City Hospital, St. Louis; Resident Assistant Physician City Hospital (in 1872-73-74) St. Louis; Editor Medical Mirror, St. Louis. 1891. GEORGE S. DAVIS, Detroit, Mich.

Another number of the Physician's Leisure Library adds brilliancy to the reputation already established by this excellent

series. Dr. Love, the author of the treatise is well known to the profession as an editor, writer and able teacher of medicine. This work is exceedingly well prepared, and will be received and read by physicians with profit.

PRACTICAL INTESTINAL SURGERY. By FRED. B. ROBINSON, B.S., M.D., Professor of Anatomy and Clinical Surgery, Toledo Medical College, Toledo, Ohio. Vol. 1. "A word fitly spoken is like apples of gold in pictures of silver."—Solomon. 1891. GEORGE S. DAVIS, Detroit, Mich.

This book, upon a popular theme, will receive a good share of the attention of surgeons. It is a painstaking resumé of the most advanced status of intestinal surgery. It is appropriately dedicated to the distinguished pioneer in the field of intestinal surgery, Dr. Nicholas Senn, Professor of Surgery in the Rush Medical College, Chicago, Ill. Every physician will do well to secure a copy of this excellent manual.

THE PHYSICAL DIAGNOSIS of the Diseases of the Heart and Lungs and Thoracic Aneurism. By D. M. CAMMANN, B.A. Oxon., M.D., Attending Physician in Class of Heart and Lungs, Demilt Dispensary; Visiting Physician to the Orphans' Home and Asylum, etc. G. P. PUTNAM'S SONS, 27 West 23rd street, New York; 27 King William street, Strand, London. The Knickerbocker Press. 1891.

Any aid to the diagnosis of diseases of the heart and lungs will be acceptable at all times. This little book is especially suited as an aid to both students and practitioners.

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Original Communications.

GUN-SHOT WOUND OF ABDOMEN, WITH TRAUMATIC
HERNIA OF APPENDIX VERMIFORMIS.

BY C. A. ABERNATHY, M.D., OF PULASKI, TENN.

On the 18th day of May, 1891, Henry Hughley, colored, aged 10 years, who lived five miles east of Pulaski, on the farm of Jas. V. Arnett, was accidentally shot in the abdomen by his brother with a musket loaded with gravel. The wounds were received in the abdomen laterally and from the right side, twelve in number, and the missiles passed from right to left across the abdominal walls. Five of these wounds were glance shots, and only the cuticle was injured and removed. Five of the missiles were imbedded within the abdominal walls, and were removed by me. Some of these gravels were oval in shape, others angular, varying in diameter from one-fourth to three-fourths inch. Two of the

twelve wounds embraced the entire abdominal walls and peritoneum, the aperture of the smaller being irregular and somewhat triangular, about one-fourth of an inch in diameter, and situated in the right inguinal region at the upper and left portion. In the left inguinal region, near the same place, the boy complained of great pain, which I supposed was from the pressure of the gravel in the abdominal cavity. A long silver probe was passed into the abdominal cavity and pushed over into the region of the pain, to ascertain, if possible, its presence, but its whereabouts was not found to exist, and, as the pain subsided in a few days, and nothing permanent has resulted from it, I have come to the conclusion that this gravel was not causing the pain, and did not enter the abdominal cavity.

The second wound entering the abdominal cavity, or at least penetrating entirely through the abdominal walls, was situated three inches to the right of the umbilicus and three-quarters of an inch above a line drawn across the abdomen and through the center of the navel. This wound presented a most remarkable condition. It was somewhat oval in shape, about three-quarters of an inch in diameter, and through the aperture was protruding a hernial mass $2\frac{3}{4}$ inches in length. At first I was perplexed to decide the real nature of the hernial mass. A thorough examination revealed the mass to be a tube, whose free end was occluded. At the portion situated just external to the opening in the abdomen, I discovered that the missile, which had made the traumatism in the abdominal wall, had also wounded the protruding mass, cutting the tube about one-third into its walls. A probe was passed into this opening and carried up to the occluded end. I then realized that I had the appendix vermiformis external to abdominal walls with a wound in its walls.

Lest this wound might not heal properly after suturing, and fearing that inflammation with ulceration and fecal extravasation might occur from traumatism, I considered it safest for the patient to ligate the appendix below the wound and to excise the part external to ligature. The appendix had become swollen and œdematous from the wound in its walls and from a slight strangulation in the abdominal aperture. So, the abdominal walls were incised one inch, that I might return the stump of the excised appendix with ease, and that I might get the better coaptation of the

abdominal walls in closing the opening in them. Nearly four inches of the cæcal appendage was drawn out of the abdominal cavity, a No. 8 twisted Chinese silk ligature, doubled, which had been boiled and then immersed in a solution of carbolic acid, was passed through the center of the tube and each half tied, the ends of the ligature were cut short, the appendix excised external to the ligature, and the stump washed in a weak solution of carbolic acid, and then placed back in the abdominal cavity. The edges of the wound in the abdominal walls were properly adjusted, and a silk ligature, which passed through the peritoneum and all the remaining tissues, closed effectively the opening. The parts were dusted with iodoform and sublimated gauze was placed over the abdomen, and around it all a flannel bandage was placed.

The operation was performed under the influence of cocaine as the anæsthetic, applied topically. At this time the boy was complaining with distressing nausea and agonizing torture of the bowels. A hypodermic injection of morphine, one-eighth grain, was administered, after which the patient slept well for several hours.

At my visit on the next day, I found him with a temperature of 101° F., and with very little pain and no nausea. On the third day the temperature fell to normal, and the recovery was uneventful in fifteen days. The bowels were moved on the third day by a clyster, and the ligature removed on the seventh day.

There has never been any disturbance of his digestion since the removal of the appendix, and no trouble whatever with his bowels. I saw the patient on the 10th of August, and the recovery has been complete.

In this case there are two features which are anomalous and remarkable. The position of the appendix vermiformis as given by Gray and other anatomists, is as follows: "It arises from the posterior interior aspect of the cæcum and passes upwards and inwards behind the cæcum." Kranssöld, who complained that anatomists have given to this appendix "step-motherly care," found that it frequently lay beside the inner aspect of the ascending colon. In this case such was evidently its position, and not only beside the ascending colon, it must have been anterior to it and in direct contact with the visceral parietes of the abdomen, and the gravel which inflicted the wound and made the aperture in the walls of

the abdomen struck it (the appendix) directly and with enough force to drag it per force from the abdominal cavity and wound its walls.

Its anomalous position, and the remarkable manner in which the appendix was forced out from the abdomen through so small an opening, without injury in the slightest degree whatever to the intestines, and the rapid recovery, made the case to me of more than ordinary interest; and while Henry's appendixless cæcum sports with peristaltic glee, four inches of what the teleologists acknowledge as the relic or rudiments of a subsidiary stomach in the lower forms of animal life, adorns the shelf of my office cabinet.

Proceedings of Societies.

PROCEEDINGS OF THE ACADEMY OF MEDICINE AND SURGERY OF RICHMOND, VA.—JUNE 2, 1891.

BY JAS. N. ELLIS, M.D., REPORTER.

President Chas. M. Shields, M.D., in the chair.

In a paper read by D. A. Kuyk, he said that electricity undoubtedly was the wonder of the age, and is yet in its infancy. The phenomena of diffusion as produced by electricity are exceedingly complex, and he doubts if we have sufficient warrant to use the term *anodal diffusion* exclusively. For instance, iodide of potassium, if put on the negative pole or cathode, diffuses quickly through the tissues, and we find free iodine at the anode. How can we account for the phenomena involved? When we speak of anodal diffusion we at once specialize too muchly, thereby contracting the utility of the very element for which we desire almost universal use and applicability. He therefore suggests the name *electrical diffusion*.

The idea prevails that the diffusion is obtained only by means of the galvanic or continuous current, whereas the faradic or interrupted current certainly has the same power, though, perhaps, not so intense; and, probably, by recent improvements and those continuously being made in the administration of Franklinic or static electricity, this change may be likewise effected. Here is a field for original investigation absolutely without limit.

As to *electro-physiology*, he said that the main obstacle to the

passage of an electric current is the resistance of the substances through which it is sent. That of the skin is 300 times as great as that of all intervening tissues. When the current has passed through any body for a short time the resistance rapidly diminishes. This is due to increased hyperæmia and succulence of tissues permeated by the current, or to the electrolytic arrangement of the molecules in the track of the current. In this respect the galvanic exceeds in strength the faradic current. Certain chemicals facilitate the transmission of the electric current, such as salt, and perhaps the iodide of potassium, iodine, etc.

Electricity, applied to a certain degree of strength, stimulates the motor-nervous system, increasing its action, hastening the circulation by its action on the muscular fibers of the arteries, producing a temporary paralysis of the vaso-motor nerves, as shown by the hyperæmia. The lymphatic system is also thus stimulated to increased activity. Indeed, all the normal functions become exalted, everything seeming favorable to a rapid absorption of whatever medicament may be employed. Hence has arisen the utilization of the electric current, substituting a rapid, deep and complete absorption for the formerly slow, superficial and imperfect method.

The galvanic current is preferable because of its greater electrolytic action; the positive pole, because through it the current enters the body, though the catalytic action is greater at the negative pole. Again, acids and oxygen appear at the positive poles, and this, by the formation of readily soluble salts, may account for the diffusibility of drugs applied beneath it.

He quoted the opinions and experiences of a few authorities upon this subject. Wacksner, of Berlin, writing upon the "Effect of Electrical Induction Current upon Subcutaneous Injections," says: "It is evident that by causing (immediately after injection) a series of strong muscular contractions and relaxations an accelerated action of the blood-stream will ensue, and the foreign substance injected will be more rapidly absorbed, and also more thoroughly. The muscular contractions are most effectually produced by means of the induction current. The most powerful muscles, such as the glutei or latissimus dorsi, are selected for injections; the skin over them having been previously moistened by a warm-salt solution, the positive pole is placed near the

point of injection, while the negative is stroked over the puncture."

A majority of electricians prefer the continuous or galvanic current.

In order to present a paper of undoubted value, Dr. Kuyk wrote to some prominent men in this field of medicine, and quoted some of the replies.

Dr. A. D. Rockwell writes that "it is pretty well understood that pain is often greatly alleviated by the introduction of anæsthetic remedies into the system by means of the galvanic current, and that effusions and glandular swellings are more successfully treated when certain medicaments are used upon the electrodes, I am inclined to believe. Electrolysis will sometimes entirely dissipate a goitre, for example, and will almost always reduce it more or less; and it becomes somewhat difficult to distinguish between the simple electrolytic action of the current and the absorptive effect of the remedy introduced into the system. A case that lately came under my observation, however, made it pretty evident to my mind that the so-called anodal diffusion might be more valuable in these cases than has been believed. The goitre to which I allude had been treated only by external applications, as the patient would not consent to the introduction of needles. The first ten applications administered in the course of six weeks resulted in a marked diminution of the tumor; but, although the treatment was continued for three months thereafter, twenty-five additional applications being made, and with increased current strength, no further reduction took place. It then occurred to me to use iodine in connection with the positive pole, although I attempted it with little enthusiasm, since in former cases I had been disappointed in its use. The result has been exceedingly satisfactory, although a greatly decreased current strength has been used. Six milliamperes has been the limit of the strength of the current essayed in connection with the iodine treatment, while without it I frequently gave as high as twenty milliamperes. It is now six months since anodal diffusion was begun, and the applications administered by this method amount to thirty-six, and there is hardly a vestige of the tumor remaining.

"In the extraction of hair by electrolysis, I have been accustomed to utilize the anæsthetic effects of cocaine by the method of

anodal diffusion. The upper lip is every sensitive, and the loose parts underneath the chin, especially near the median line, and the pain is often unbearable. Anodal diffusion, with cocaine, ameliorates greatly the pain of this operation.

"I have also obtained good results from its use in the treatment of neuralgia."

Dr. Henry G. Piffard, of New York, says: "A good deal of misapprehension exists as to this matter of cataphoresis, and a recent article in one of the journals tends rather to becloud than to simplify the subject. The inferences that the reader would naturally draw from the article in question are, first, that the medicated solution should always be applied to the anode or reophore supplying the positive current; and, second, that certain salts, such as the hydrochlorate of cocaine, iodide of potassium, etc., are diffused directly into the system by means of the electric current. There is no evidence whatever on which to base these assumptions. Salts in solution are electrolysed or decomposed by the galvanic current, and acids, oxygen and alkaloids seek the positive, while alkalis and basic bodies seek the negative pole. Clinical experience agrees with theory, and shows that if the anode be moistened with hydrochlorate of cocaine the physiological effects of the drug will be manifested. In this case, the hydrochloric acid remains at the reopore, and the basic cocaine penetrates the skin, which, in this case, acts as the negative. If, however, we desire to obtain the iodine effects from the iodide of potassium, the cathode—not the anode—should be moistened with the solution.

"The possibility of cataphoresis has been denied by some, but the writer's experiments, made many years ago, satisfied him not only that many drugs could be introduced in this manner, but also that the method has little practical value. Anæsthesia by the anodal diffusion of cocaine may prove a novelty to the patient, and impress him accordingly, but a few drops of the solution injected with a hypodermic syringe will answer all practical requirements in the great majority of cases."

Dr. Wm. James Morton says: "You will find in the *New York Medical Journal* of April 25, 1891, a short article by me, which may give some suggestions, and render needless my writing now in full. I have brought out in that article several new points, viz: 1st, anæmia cataphoresis; 2nd, simple cataphorsic plaster;

2rd, a simple and new electrode, conducting on both sides; and, 4th, the method of employing the medicine on both poles.

“I do not believe the term ‘anodal diffusion’ a good one. It does not seem to me to cover the entire ground. Truly there is anodal diffusion. But granting that, we must also grant kathodal diffusion, for the migration of the ions in all electrolytes takes place in both directions. That is why I say, in practice, put the medicine on both poles. Though, if one cares to be more accurate, he could select his medicines appropriate to either pole—that is to say, in some cases. This, I think, would only be a refinement, which, in the present state of cataphoric medication, would lead to needless confusion.

“Of course our views as to what takes place in the intra-polar region in cataphoresis and electrolysis are mainly hypothetical; at the poles themselves it is otherwise. There we know that the respective constituents of a binary compound, the ions form an electrolytic point of view, bump up, so to speak, against the faces of the electrode, and collect there. The fluid has constituted an electrolytic conduction; the metals of the electrodes, on the other hand, necessitate metallic conduction, and the moving elements in the fluid cannot climb along a wire; therefore, they are arrested where metallic conduction begins.

“Now, since the field of action, in cataphoresis is from metallic face to metallic face of each electrode, and the fluid which is in action is not only the part of the body included, but quite as much the particular fluid medicine on the absorbing surfaces of the electrodes, it follows that we have a compound electrolyte; and, that to properly understand and apply the method, we must study it, not alone from the mechanical point of view of electrical osmose or cataphoresis, but also from the point of view of electrolysis and electro-sympathesis.

“I can, perhaps, make my position that the process is chemical, electrolytic, and not entirely mechanical or cataphraic, clearer by two statements quoted from Logge:

“First, ‘Electrolytic conduction is invariably accompanied by chemical decomposition, and, in fact, only occurs by means of it.’

“Second, ‘The electricity does not flow through, but with, the atoms of matter, which travel along and convey these changes something after the manner of pith balls.’

"There is one point to which I might call your attention. This is the slow rate of travel of atoms through water, under propelling electro-motive force of one volt per linear centimeter. Hydrogen travels at the rate of 1.08 centimetre per hour; potassium, at the rate of 0.205 centimeter per hour, and so on. This would indicate that ample time should be given to get full cataphoric effects.

"I am about to make some new experiments as to the efficacy of the Franklinic interrupted current of the electro-static machines to carry medicines through the skin. My experience with such currents thus far have not given me noteworthy results."

In the article referred to by Dr. Morton, he describes his method of "Anæmic Cataphoresis," by which he claims to localize the effect for that part alone for which it is intended. He cuts off the blood stream from the part to be treated by an Esmarch's bandage or a rubber ring, or when these cannot be applied, the same result is accomplished by compression with the narrow edge of a disc-shaped electrode. He uses medicated plasters in measured dosage, thus rendering special electrodes unnecessary. He finds his method serviceable in gouty and rheumatic joints. He quotes the case of Dr. Lewis A. Sayre, whom he has treated by this method, the swelling at his wrist-joint having been reduced half an inch, the pain disappeared, and considerable movement was obtained where before there was none, and all of this was accomplished within a few days. Nothing up to this time has done so much.

Dr. James N. Ellis reported a case of extro-version of the bladder, with congenital absence of the vagina and external organs of generation, that came under his observation as physician in charge of the Surgical Department of the City Dispensary. The anterior aspect of the posterior wall of the bladder was seen as a pouting, red mucous surface between the umbilicus and pubes, somewhat elliptical in outline, with two small tit-like projections near its centre corresponding to the openings of the ureters, from which the urine was discharging drop by drop. In the absence of anything resembling a penis or testicles, it is assumed that the child (three years old) is a female; but, on account of her tender age, no attempt was made to determine the existence of a uterus. The general health and nutrition of the child seem good, and she

is bright, pretty, and intelligent for one of her age. The inconvenience otherwise resulting from the constant dripping of the urine is obviated by the use of cloths, that are removed when saturated, and replaced by fresh ones. The formation of an artificial vagina for the exit of the menstrual flow will be doubtless necessary at puberty, but until then operative interference promised but little relief.

Dr. John N. Upshur said that he saw a case of extro-version of the bladder in an adult male, when a student at the University of Virginia. The testicles were normal and the penis well developed, but the urethra was cleft, exposing its bare mucous membrane back to the point at which it disappeared in the scrotal tissues. His sexual instinct was unimpaired, and he frequently suffered from violent erections.

JULY, 7, 1891.

Dr. Hunter McGuire spoke from notes on Cataphoretic Treatment of Goitre by Iodine, of Chronic Orchitis, of Uterine Fibroids, etc.

About six months ago, Dr. Waite, of the firm of Waite & Bartlett, of New York City, gave him a cup-shaped electrode, and demonstrated the fact that, by its proper use with a galvanic battery, a solution of the muriate of cocaine could be driven into the skin and complete local anæsthesia produced. A small piece of absorbent cotton, or a piece of blotting paper, saturated with the solution of cocaine, was put into the shallow cup of the instrument, and the electrode attached to the positive pole of the battery. The electrode was then placed upon the skin where the insensibility of anæsthesia was desired, and the sponge on the wire joined to the negative pole was placed on some convenient neighboring part.

It required a current of some four or five milliamperes to drive the cocaine through the skin and make the anæsthesia complete—the insensibility extending for some distance below the surface of the skin.

A day or two after the above demonstration was made (about January 10th of this year), a case of enlargement of the thyroid gland came into the hospital (St. Luke's). The goitre was bilateral, old, very large, hard, and seriously interfered with respiration. It had resisted for years the ordinary treatment of such

growths. Internally, iodide of potash, iron and mercury had been faithfully tried; and externally, at different times, iodine and biniodide of mercury frequently used. The goitre steadily grew, and lately its increase was so rapid that the lady, in great alarm, came to the Doctor to ask for some surgical operation. She had spasmodic attacks of palpitation of the heart, frequent spells of giddiness or vertigo, but no ocular protrusion.

Instead of attempting the removal of the gland he determined to use iodine in the cup-shaped electrode, and see what effect it would have on the growth. The Doctor put in the cup of the electrode some absorbent cotton, first dipped in water and squeezed as dry as possible, and on this cotton he poured ten or fifteen drops of the tincture of iodine. The electrode thus prepared was placed on the most prominent part of the goitre—the negative pole on the back of the neck. The galvanic current was then turned on until the milliamperemeter showed the strength of six or eight. This current was kept up for ten minutes. While using it she said that she tasted the iodine, and afterwards that this metallic taste in her throat lasted for hours.

When the electrode was removed, the cotton was found simply stained with the iodine, but most of the iodine had disappeared.

This application of electricity and iodine was repeated every day for three weeks. Not always, but nearly every time she said she tasted the iodine, and said that this was the most disagreeable part of the treatment. The tumor gradually grew smaller—at first quite rapidly—but afterwards more slowly, getting more and more indurated as it contracted. The cardiac and cerebral symptoms disappeared completely.

This patient, after three weeks, was called home by the illness of a child, and did not come back for a month. The goitre, however, continued to decrease while she was absent. When she returned, the applications were again made daily for three weeks. The gland was reduced about one-fifth of the size it was when the treatment was begun, and in spite of all further use of the remedy remained stationary. But all of the subjective symptoms were gone, and the lady left in excellent health.

Two other cases of chronic goitre were treated in the same way, and with the same results—the hypertrophy diminishing, rapidly

at first, then more slowly, then reaching a point when it became stationary.

In four cases of recent hypertrophy of the thyroid gland in young women, the enlargement rapidly disappeared under the use of these measures.

Iodine and electricity have, of course, been long used for goitre. As to how much of the good obtained above is due to one or the other of these agents the speaker does not know.

Lately, in a case of pronounced exophthalmic goitre, he used this treatment with quite rapid diminution of the enlarged thyroid gland, and a decided amelioration of the other symptoms. The tendency to syncope and dizziness were lessened, and pulsation of the arteries diminished, but no perceptible change in the ocular protrusion resulted. The case is too recent, however, to report.

In several cases of chronic inflammatory enlargements of other parts, the Doctor has used this measure with very positive good.

In a case of chronic orchitis it acted promptly and decidedly.

The treatment of fibroid tumors of the uterus by electricity, after the manner of Apostoli, is used by many surgeons.

No one who has tried it faithfully and patiently can have any doubt of its great value in very many cases. For several years the speaker has used it, and with very great good. Lately, when he could reach the tumor through the vagina, he has used the iodine after the plan just reported, letting the current go as high as ten milliamperes only. He obtains very positive good in this way, and without pain to the patient. Under its use the bleeding will cease, the pain disappear, and the tumor grow smaller, just as well as when the electrode is introduced into the cavity of the womb, and the current made as strong as from one to two hundred milliamperes.

Dr. McGuire is now having constructed a small electrode, to see if hypertrophy of the tonsils cannot be reduced in this way.

Of course, if it is valuable, it can be used in a great varieties of ways and for many purposes. He has made some experiments with other medicines, but has not gone far enough to make any report.

If fluid medicated agents can be sent in this way into a growth, would it not be well to try this method of treatment of cancer in its earlier stages?

Dr. Charles M. Shields continued the discussion by reporting some cases of fibro-cystic goitre that he had treated with simple electrolysis. In these cases the tumor was not penetrated by the needle electrode, but the ordinary sponge electrodes were placed over it. The constant current from a wall cabinet battery was used, and about fifteen to twenty-five Leclanche cells employed. The sittings were from three days to one week apart, and the electrodes were kept in contact with the growth from ten to twenty minutes at a time, or as long as the patient could stand it without the skin being blistered.

In fibrous goitre, Dr. S. did not expect a great deal from electrolytic treatment, although he had always obtained some diminution of the growth, but in the former we are most frequently called on to treat the fibro-cystic variety. He had invariably gotten good results. He reported three cases of complete cure, one of which well illustrates the advantages of electrolysis as compared with the usual method of treatment. This patient, a man, aged about 30, had been under treatment for about five years before this method was used. He stated that in that period not a single day had passed without his having taken absorbent medicine, applying some absorbent locally or having it injected or blistered. In spite of this constant treatment for five years it continued to increase in size and density. The electrolytic applications were made twice a week at first, then once a week, and continued for several months with the result of complete absorption. Dr. Shields believes that in electrolysis we have a most satisfactory method of dealing with goitre.

Dr. W. S. Gordon said that he had obtained good results in a case of cystic goitre from the use of Lugol's solution until iodism was induced. The diminution was decided, but not complete, when the patient was lost sight of. He had, however, succeeded in dissipating a fibro-cystic goitre by the means above mentioned. He cites these two cases to show that absorptives alone, without electricity, are sometimes efficient.

Dr. Landon B. Edwards reported two cases of forming goitre in females—one a lady of about 18, and the other about 35—which he had cured by local applications of iodine. He directed that an impervious material, such as oiled silk, be worn as a collar over the applications of tinctures of iodine, so as to prevent as

far as practical the dissipation of the iodine. In both cases he made a few hypodermic injections into the goitre of about a half grain of iodine dissolved in a weak solution of the iodide of potassium. He remarked upon the benefit of the combined use of the cataphoretic treatment by iodine and keeping the surface over the goitre will painted with iodine. Iodinism has not been reported as a result of such plan of treatment.

Dr. M. D. Hoge, Jr., said that he had suggested to a dentist that the use of cocaine by anodal diffusion might be successfully employed to diminish the pain incident to the extraction of teeth. The instrument used was a small piece of cotton saturated with a ten per cent. solution of cocaine, which was held in a cup-shaped appliance and placed successively on each side of the gum opposite the tooth to be extracted. It took from three to five minutes (depending on the strength of the current) for complete anaesthesia to ensue. The tooth was then extracted without pain.

Another possible use suggested by Dr. Hoge is in cases of fatty degeneration of the spinal cord. Why could not an alkali be introduced by means of anodal diffusion, and, penetrating to the degenerated tissues, make an emulsion of the fatty products?

Dr. Hunter McGuire, replying to questions, and closing the discussion, said that the local anaesthesia from the anodal diffusion of cocaine lasted sufficiently long for operative purposes. When iodine is used, if the application is long continued, or the current of sufficient strength, a blister will result. He has never used pure iodine, but always the tincture, and does not know if the electricity conducts it into the tissue as a vapor or in solution. He has used anodal diffusion in a great number and varieties of cases not mentioned above, and is convinced that its field of usefulness is a large one. If, as is supposed, it is an agent that will conduct a medicament into the tissues and bring it into intimate contact with the neoplasm, may we not reasonably hope, with its assistance, to so modify the cancer cell as to abort a beginning growth?

Selected Articles.

AN ADDRESS DELIVERED AT THE OPENING OF THE SECTION OF PATHOLOGY,

At the Annual Meeting of the British Medical Association, held in
Bournemouth, July, 1891.

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ON THE USES AND PROSPECTS OF PATHOLOGY.

The science before us, that of pathology, must be regarded in its widest sense, not as concerning only the results of disease, but also its processes. In times not very far remote, little was known of pathology but rough morbid anatomy, and very little of that. A few of the larger facts—the nature of empyema, for example—were known to the ancients, but I cannot find that conditions to us so obvious as hepatisation of the lung and cerebral hæmorrhage were recognized before the 17th century, though the symptoms in connection with them had long been known. Large morbid anatomy has advanced so much, especially during the last hundred years, that it may be believed that there are now few changes obvious to the naked eye which has escapèd notice. This line of research may be thought to be nearly exhausted, but let us not neglect the old in the interest which attaches to the new. Rough morbid anatomy is the groundwork of medicine, and must ever be essential to the physician as presenting results in a compendious form. It may even happen that results thus broadly presented may be evident to the practiced eye which the microscope might

fail to make equally clear. Giving, therefore, full value to simple modes and broad results, let us briefly estimate what has been accomplished in other ways; see what has been done, and what we may reasonably hope for.

Something, what seems to us much, of minute morbid anatomy has been displayed with regard to most organs and tissues, but it is possible that those who come after us may regard our knowledge at best as absurdly incomplete, and exercise toward us the sort of charity which grown persons extend to a child. Of the more substantial organs, we probably know something which, though rough, cannot be altogether wrong. But what shall we say about the nervous system? We may say that within the last half century the minute morbid anatomy of the nervous system has been begun, and some lines of light, however dim and narrow projected into places dark since the creation. If we have not seen all, we have at least seen that there is more to see; we have made darkness visible. Diseases once thought to be functional or without organic change, have been provided, some like essential paralysis, chorea, and diabetes mellitus, with something of tetanus and the paralysis of Landry, have been suspected, if not convicted, of being connected with the poisons which, though less visible, are not less material. The mystery of the nervous system has not yet been solved, but, at any rate, we are upon its traces. Let us hold by what we have acquired while we hope for more, and trust to morbid anatomy to save us from such blindness as discerns behind the systems of cerebral hemorrhage or meningitis nothing more material than a change in the electric condition of the nerve cells.

To pathological results—bare observations in morbid anatomy, whether large or small—it must be added that we have acquired some insight, however incomplete, into certain pathological processes so as to see, as through a glass darkly, by what means and in what way Nature, ever actuated by the best intentions, does the harm which it is the province of our Section to investigate. Foremost among such modes of going wrong comes the embolic, which is too well known to need further notice here than the bare reminiscence of how much of our present knowledge, especially of cerebral disease, is due to it. Next may be mentioned the suppurative, which has a double interest both in what it takes away

and what it leaves behind. The loss of leucocytes, under the name of pus corpuscles, explains the relation of blood and pus—hitherto a mystery; and the lardaceous deposit as a consequence gives a morbid interest in what is left. We see in this something which may be expressed roughly, but perhaps not altogether untruly, by an elementary rule of arithmetic, that of subtraction—take pus from blood and lardacity remains. This is important to the surgeon, for it shows how organic change is consequent upon a process which his art can often put a stop to; and it enhances the use of antiseptic methods by which this injurious exit may be prohibited. I do not imply that lardaceous disease has no other origin, for it is often brought about by syphilis, which is attended with a deficiency of blood corpuscles. It is to be suggested that, whether by escape or other modes of diminution, the balance of the blood is similarly disturbed.

Among pathological processes we may pause for a moment on the results which have been attributed to the excessive and deficient action of oxygen. The physicians who followed upon the great chemical discoveries of the end of the last century and the first half of this, and were, so to speak, brought up upon Liebig, dwelt upon oxygen as the paramount agent in pathology, attributed most diseases to either too much of it or too little, and considered it with too little regard to the vital action of the organism. Bence Jones, great as he undoubtedly was—and here let me contribute my humble branch towards keeping his memory green—posed too simply as the Apostle where Liebig had been Precursor, and preached chemistry *in partibus infidelium* with a single eye to abstract material, to the neglect of the properties of living tissues and living organisms. The chemical school saw in inflammation only excess of oxidation or combustion, which may truly exist, and of which the increase of temperature may be a result; but they took too little account of what may be antecedent to this in tissue and vessel. In diabetes they saw little more than a deficiency of oxidation, which indeed there may be, but which must be secondary to changes in organic structure which as yet we have seen but imperfectly.

With regard to gout and uric acid as products of suboxidation, the chemists got to results which seem to embrace the truth less incompletely, though even there there is probably something to

learn of organic lesion or disturbance outside the domain of pure chemistry. We know something of hepatic disturbance in connection with uric acid. What more will be added, and to what organs and tissues it will relate, is work for the future.

As a definite result of suboxidation, I may point to what has been advanced with regard to hæmoglobinuria. This is closely allied to the symmetrical gangrene of Raynaud, and is associated with localized lividity of the skin. Professor Murri has found reason to believe that this lividity is due to the cutting off of the arterial current and the oxygen which belongs to it by vascular spasm (one of the recognised results of malaria), and that the destruction of corpuscles is due to the carbonic acid in the parts from which the oxygen is thus shut off. If this be so, we have a result of suboxidation which deserves a prominent place in chemical pathology. In corroboration of this theory I may mention a fact which came within my own knowledge. A young man who had never had any malarial affection, and was apparently in good health, ran in a race until he fell down from dyspnoea and exhaustion. The first urine passed afterwards was loaded with the disintegrated products characteristic of hæmoglobinuria.

A disease which presents itself as of chemical origin, if one due almost certainly to a specific deficiency in the constituents of the food may be so regarded, is scurvy—one of which the chemical secret has apparently been so nearly exposed that we ought to be almost within grasp of the chemical antidote. The conditions which give rise to sea scurvy are generally known. It is not probably as widely recognised that scorbutic affections are so common on shore—among infants brought up by hand—that this form of land scurvy is scarcely less important. It is to be attributed to the exclusion of fresh milk by various artificial preparations of it. Not that these preparations are in themselves injurious, but they are insufficient.

Milk in its fresh state, and of good quality, whether from biped or quadruped, is antiscorbutic; preparations or sophistications of it are not so, or not so to a sufficient extent. Scorbutic hæmaturia and scurvy rickets are but too frequent consequences of this substitution. We know the broad result, which is enough for practice, but we do not know the isolated want. What does fresh milk contain which is so essential and so difficult to preserve?

We no more know this than what is in lemon juice to be antiscorbutic, while neither citric acid nor potash is so. The problem is attractive, like a puzzle; some day it will be solved, and then we shall wonder why it was not solved before.

Now we approach a field so vast and so imperfectly seen, that we cannot discern its extent. So many disorders—it is enough to mention relapsing fever, anthrax, tuberculosis, and leprosy—have been shown to have foreign organisms associated with them, that we may be sure that before long many more will be in the same position. We may—indeed we must—find the essential principle of malaria, probably grossly vegetable; we may find that of syphilis, and can scarcely fail to find those of the infective fevers. But if we find a micro-organism for each disease, the question may still remain, what is the relationship between the two? Does the organism cause the disease, or the disease the organism? And if the organism be the cause of the disease, is it the immediate cause, or is the immediate cause something which the organism produces? Presuming that the bacillus is the essential cause, with or without an intermediary, it will still remain to consider the soil as well as the seed. Some seed falls on suitable ground and bears fruit an hundred fold, other seed falls on unsuitable ground with a negative result. Individual differences in the liability to disease play a large part in it.

Probably every person who walks a hospital or lives in a city receives habitually and abundantly the bacillus of tubercle; some become tuberculous, others do not. The difference must be in the man not in the microbe. The condition of the soil would seem to be of more practical importance with regard to tuberculosis than the presence of the seed. Why the bacillus sets up tuberculosis in one and not in another must be due to the fitness of the tissues for its retention and maintenance, in regard to which fitness we can discern hereditary influence, that of chronic inflammation, and of what we must be content to express as lowered vitality. How common it is for an attack of pneumonia, which there is no reason to suppose was tuberculosis at the outset, to be succeeded by caseation, and that by tuberculosis. The hepatisation has provided a fitting soil. Dr. Delépine* gives similar illus-

*An Opinion on Dr. Koch's Treatment of Tuberculosis, *British Medical Journal*, November 22, 1890.

trations of the value of tissue change in determining tuberculosis. In the course of a case of low pneumonia dependent on pressure on the vagi, bacilli presented themselves in the sputa, which at first was free from them. In a case of hæmorrhagic disease of the lung in a drunkard bacilli were found in the affected regions, and these only, evidently as a superaddition. Thus, with all respect for the bacillus, let us attach some importance to the receptivity or power of resistance of the organism.

With regard to bacilli in general, we find that these which so recently were the ultimate results of research are now the bases for further advance. There is no finality in Nature or in human curiosity. Outside the micro-organisms is a pathological system which though we recognise its existence and its importance, we understand but imperfectly. If the present rate of progress is maintained, we must be on the eve of discoveries in the physiology of disease which can scarcely fail to be of transcendent importance. The discoveries of Pasteur, Wooldridge, Hankin, and Sidney Martin take us beyond the micro-organism into a new field of organic chemistry, beyond the bacterium to its products.

The discoveries of Wooldridge and Hankin with regard to the chemical products of the anthrax bacillus open a vista to new fields of view, while they show much that is old in a new light. The anthrax bacillus has been shown to engender a substance of the nature of an albumose, which is supposed to be fatal to the bacillus itself, while upon the affected animal it has a duplex action; in large doses it produces the symptoms of the disease, in small doses it confers immunity from it. The study of the bacillus has given us antiseptic surgery; the study of its products may lead to we know not what in medicine, whether preventive or curative. Old truths grow and new ones gather round them. Jenner's vaccination may prove but the prelude to many similar modes of prevention. Immunity from anthrax and from hydrophobia can be brought about by the introduction of a harmless dose of poison which in large quantity or a more active form is deadly. Why should not tuberculosis be prevented in a similar manner? The prevention of tubercle would seem to be more feasible than the curing of it; but I will not enter upon a subject which is sure to be fully dealt with elsewhere.

In the fact—if it proves so—the bacillus is killed by its own

products we might see something hopeful, were it not that these products, if sufficiently active and abundant to do so, are likewise noxious to the host. The evil bringing its own cure is the realisation of the old superstition, according to which a viper's bite is cured by its fat, and virtue found in the hair of the dog that bit you. It may, indeed, be thought that the life-products of every organism are injurious to itself. The atmosphere which man creates around him is fatal to him; a fish poisons its own element; and even plants render their soil unfit for their maintenance, not only by exhaustion, but, as some have thought, by excretion. The rotation of crops has been thought, to have some such warrant. But when we come to the preventive agency of bacterial products, we come to what is less easy to understand. Small-pox and scarlatina smite once and smite no more. The old idea of something in the blood on which the disease flourished, which was used up by the first attack, does not explain why an anthrax product prevents anthrax, for it does so without any such development of the disease as could be supposed to exhaust its pabulum. Provisionally we are driven to the experience of toleration from use, which is as old as Mithridates, and of which there are many ancient and modern instances, among which may be mentioned alcohol, opium, and more especially tobacco. Custom doth make it a property of easiness. A small dose would seem to produce a tolerance which only a very large dose can overcome.

The influence of pathology, that is, of the habitual consideration of the nature and results of disease, has been hitherto to confer that most extensive of all knowledge—a knowledge of what we cannot do. A study of the results of disease and of its natural laws is a continual warning against the superficial fussiness of the shallow practitioner, who elaps on here a poultice and there a blister, and somewhere else rubs in an embrocation assiduously, with a greater faith in the penetrating effects of such applications than knowledge of the profound nature of disease. Pathology teaches humility. But it does something if it teaches the physician that his place is often that of the judicious bottle-holder. He takes no part in the fight, but he supports the combatant in whom he is interested. If he cannot cure the disease he does something if he prevents the patient dying of it.

Such is the present position; but who can say what is before us? Pathological discoveries which revolutionise our knowledge of the nature of disease are not likely long to remain without practical results in the cure or prevention of it. In the conflict between man and the bacterium, between the highest of animals and the lowest of vegetables, it must be allowed that so far the vegetables has the best of it; but the animal though more vulnerable is the more inventive, and it may happen in the future as it has in the past that science will prevail against numbers. Bacteriology is in its infancy, but it is gigantic, at least in possibility. To isolate the organic germs of the tubercle, leprosy, and other diseases which have similar pathological associations may be but the first steps towards results which may prove to be of importance to humanity beyond all politics, beyond all conquest, beyond all the appliances which minister to ease, comfort and luxury.

Before I quit these great subjects, the anatomy and physiology of disease, I must glance at the aspect of them which can never be better presented than to a meeting like this gathered from all parts of the kingdom. I refer to what may be called the geography of pathology, the effects of climatic and other local influences in promoting and preventing morbid processes. The therapeutic effects of climate are beyond our proper scope, but nevertheless it is impossible to avoid some inferences which may spring directly from its pathological effects. The Father of Medicine wrote a treatise on "Airs, Waters, and Places," but there is still much to be learned. Of local influences, though we know comparatively so little, yet we know enough to suggest that of the means under our command of modifying chronic disease change of place is the most important. To treat by change of place is to invoke the great laws of Nature which act without ceasing and upon the whole body, and are the ever-present regulators of all life and growth. To see as much of this as we can we must look from two points of view, not only at what locality prevents but at what it produces. To know that there is little stone in Ireland and much in Norfolk, little in the western counties, much in the eastern; that while in England it is most frequent in the colder parts, it is so prevalent in India that lithotomy has long been a native accomplishment; to discern the laws which underlie these

facts, as we can partially do, cannot fail to throw light on the origin of the disease and help it its prevention.

The frequency and severity of diabetes in some parts of India and Ceylon cannot but suggest the influence of an opposite climate in its amelioration. I am told that among the meat-eating Parsees of India both diabetes and gout present a frequency which transcends anything of which we have experience in this country. If the climate of India promotes these conditions, what will be the effect upon them of that of the north of Europe or of America? If scorbutic affections are invited by cold, presumably by way of tissue waste and oxidation, what will be the result of the same agency upon uric acid diathesis, gout, and the disorders in which oxidation is wanting? It might be better to shudder in the frigid zone than to suffer arthritic tyranny in the temperate.

The infrequency of the granular kidney as originating in sub-tropical districts has already had its influence in the treatment of the disease. Short of such great changes as between zone and zone, even within the limits of the islands, more may be in our power than has yet been recognised. Between the Scilly Islands and Aberdeen are many varieties of hot and cold, and moist and dry, many differences of water and of altitude. There is much phthisis in Scilly under warmth and moisture. Is this due to race, to intermarriage—as has been thought—or to location? Where within these islands does phthisis least prevail? Where is oxidation so keen that gout is burnt and purged away? Let us know what diseases are promoted and what are prohibited by the *genius loci*; let us take the great sources of external Nature into our confidence, and we shall be able to control disease by greater agencies than the druggists can supply.—*British Med. Journal*.

Extracts from Home and Foreign Journals.

SURGERY.

A NEW METHOD OF PRODUCING LOCAL ANÆSTHESIA.

Dr. Wiesendenger describes in the *Jour. für Zahnheilkunde* a new method of producing anæsthesia by the application of cold, the characteristic feature of which is that it is not the cold-producing agent which touches the desired part, but a metallic tube or chamber which is cooled by carbonic acid. The cold may, according to the requirements of the case, be regulated from the temperature of cold water to one sufficiently low to cauterize. The first symptom of this artificial cold is anæmia of the cellular tissue, producing a slight sensation of burning, which is followed by anæsthesia, which lasts from one to two minutes and then disappears without any ill effects. As the instrument may be manufactured of almost any shape, it is evident that this new method may be used for a variety of purposes. The simple turning of a tap will regulate the stream of carbonic acid to any degree of temperature down to 4° F. No moisture is produced. In using this cold for the purpose of cauterizing, the surgeon has the advantage of producing anæsthesia at the same time. When applying it to any of the internal cavities, such as the mouth, it is necessary to have the parts carefully dried, as the tissues would otherwise adhere to the instrument. Dr. Kummel applied the method in the case of a boy in the Maria Hospital at Hamburg with such complete success that the boy looked on without moving a muscle while a deep incision of twelve centimetres in length was made in

his thigh. Other gases which can be brought into a fluid state may be used in place of carbonic acid. The carbonic acid which has been used for the purposes of anæsthesia may be led into a vessel which has been tested to a pressure of three atmospheres, and is provided with a manometer and safety-valve, whence it could be used as a motor agent for preserving food. An iron bottle of fluid carbonic acid at a pressure of fifty atmospheres is sufficient for fifty operations. This can be bought for four or five shillings. The instrument for the application of cold to the tissues costs thirty shillings.—*Lancet*.

MODERN RENAL SURGERY.

Dr. A. Obalinski sums up his views regarding the treatment of severe inflammatory affections of the kidneys and their sequelæ in the following way: 1. Suppurative inflammation of the kidney and surrounding structures indicates the operation of nephrectomy in order that free exit may be given to the purulent and other inflammatory excretions, and that the focus of the disease may be thoroughly cleansed, and further extension of the thoracic and abdominal cavities and the hip-joint, be thus prevented. In most cases the single lumbar incision, as was performed by Simon, will suffice, but when there has been extensive undermining of the peritoneum the formation of a large flap, as practiced by Bardenheuer, is to be preferred, as such operation permits of ready access to all extensions of the main pus-containing cavity. 2. Ureteral fistula should always be treated by removal of the corresponding kidney, provided the surgeon can assure himself of the existence of a sound renal organ on the other side. Nephrectomy in such cases is indicated, not only on subjective grounds and when, for instance, the external flow of urine cannot be restrained by any apparatus and the patient is thus prevented from following his occupation and from enjoying a comfortable existence, but also on objective grounds, since, notwithstanding the utmost precautions, an old ureteral fistula may result in suppurative inflammation of the corresponding kidney and of the adjacent soft parts. 3. Nephrectomy performed under these last-mentioned conditions offers less favorable prospects than in cases in which there is an absence of suppuration or of cicatricial adhesions. 4. There can be no doubt that, under equally favorable conditions, the trans-

peritoneal method can be performed more rapidly and with greater ease than the extraperitoneal method of nephrectomy, and that the progress toward recovery is more speedy after the former operation. The transperitoneal method, however is not applicable to every case, and should be reserved for those instances in which the mischief is confined within the capsule of the kidney, the extraperitoneal method being indicated when the suppurative process has involved the perirenal structures.—*Med. Record.*

FORMIC ACID IN SURGICAL TUBERCULOSIS.

In a paper read before the German Surgical Congress, Dr. Senger stated that his attention had been drawn to the fact that, in the treatment of surgical affections with iodoform-glycerine emulsions, the effects produced differed greatly, according to the quality of glycerine employed. It was found that impure glycerine contained always a certain amount of formic acid, the proportion varying according to its degree of impurity. This led him to infer that the marked irritating properties of the formic acid might have some share in the curative effects of iodoform emulsions in tuberculous processes. The fact that iodoform, when introduced into the body, is converted by the process of oxidation into formic acid and hydriodic acid, explains its varying effects in different cases. When oxidation is sufficiently active to decompose it, iodoform exerts a curative action, which is not manifested when the process of oxidation is feeble. For these reasons the author added formic acid to iodoform emulsions and obtained favorable results, where the latter proved ineffective. In cases of tuberculous arthritis of the ankle-joint, formic acid was used alone, the formate of soda in solutions being injected. The results were excellent.—*Deut. Medicin. Wochenschr.*

A PILL LODGED IN THE RIGHT BRONCHUS.

I prescribed some pills containing iron for a lady about four weeks ago, which she took regularly three times a day with great benefit until Wednesday, August 12th. Late on Thursday evening she called and said she was in such pain that she could not pass another night unrelieved. The pill which she took after dinner the day before did not seem to go the right way, and all her efforts to dislodge it failed. Before long pain set in in the front of

her chest three inches below her right clavicle, and after a time a similar pain occurred in a corresponding spot behind, and deep breathing increased the suffering. She had been able to swallow fluids and solids all the time without difficulty. The last few hours she had expectorated with a cough, and whatever came up had the taste of the pill. Auscultation rendered no assistance. I laid her on the left side on a couch with her hips raised on cushions, and gave a few pats on her back, producing a sudden cough, and expectoration containing red spots like blood; this I put under a microscope; but there were no corpuscles. I diagnosed clearly that the pill had gone into the windpipe (probably owing to her drawing a breath when taking it), and that it had lodged in the lower bifurcation of her right bronchus. I raised her hips and waist high, and asked her friend who had accompanied her to pat her back. The result was a sudden cough with dark expectoration. When she had recovered her breath, directly I raised her as before the pill was ejected into her handkerchief. It was elongated, and retained the white coating at the ends, but this had been dissolved off where the pill lay in contact with the mucous membrane of the bronchus.—*C. Steele, M.D., F.R.C.S., in The Lancet.*

MEDICAL

MOSQUITOES AS PREVENTIVE INOCULATORS.

We referred recently to the curious method of conferring immunity against yellow fever employed by Dr. Carlos Finlay, of Havana, namely, causing healthy individuals to be stung by mosquitoes which had previously bitten those suffering from the fever. The experiments in this direction have been carried on now for about ten years, and the results would seem to show that this insect is a good attenuator of the yellow fever virus.

In the *Am. Journal of the Med. Sciences* for September, 1891, Dr. Finlay presents some statistics of his preventive inoculations by means of these insects which are interesting. He was fortunately able to obtain some useful comparative statistics from the

fact that he had medical charge of two religious communities, the members of which are partially renewed almost every year by the arrival of new-comers from Spain to substitute others who have resided several years in Havana. Nearly every year he inoculated some of the new-comers, while others did not go through that ordeal. During the period 1883-1890, forty-nine of these new-comers were inoculated, and thirty-two were not. After deducting from the inoculated thirteen cases who had not been long enough in the country to permit any definite conclusion to be drawn from them, there remained thirty-three inoculated, and thirty-two not inoculated members of the same communities, having arrived in the same years, leading the same life, and exposed to the same chances of infection. Indeed, it would be difficult to find anywhere a better opportunity for comparing the results of any method of prophylaxis. Of the inoculated some had no febrile symptoms, either immediately after the inoculation or subsequently; others had a mild attack of fever, accompanied or not with albuminuria; and two had regular yellow fever, from which they recovered. Of the not inoculated, twenty-one either had a mild fever or escaped all illness, and eleven had yellow fever, five of them dying. Thus none of the inoculated died of yellow fever, whereas five (or fifteen and a half per cent.) of the non-inoculated did die of it. Of all the persons inoculated in and out of these communities, but one died of yellow fever.

From a study of these comparative results and of the results obtained in other cases in which inoculations were practised by Drs. Finlay and Delgado, the author draws the following conclusions as to the value of his method:

1. The inoculations with one or two recently contaminated mosquitoes, in the manner practised, are free from danger, inasmuch as the numerous trials which have been made produced at most (in about eighteen per cent. of our cases) a mild attack followed by immunity.

2. We must attribute to the influence of the inoculations with contaminated mosquitoes: *a*, The mild acclimation observed in ninety-four per cent. of our cases, whereas the same desirable result has only occurred, *cæteris paribus*, in sixty-five and a half per cent. of the non-inoculated; *b*, the reduction of cases of regular yellow fever to the proportion of six per cent. instead of nine-

teen per cent., and, *c*, that of fatal yellow fever to less than two per cent. instead of fifteen and a half per cent., one single death from yellow fever having occurred among sixty-seven persons inoculated since 1881 until the present date.

3. The contaminated mosquitoes appear to lose, either partially or completely, their contamination after they have stung healthy subjects; whereas the contamination appears to become intensified by successive stings of the same insect on yellow fever patients.

4. The inoculations performed during the colder season should not be considered to afford sufficient protection, but should be repeated on the approach of the hot season.—*Med. Record*.

A NEW MODE OF ADMINISTERING THE BROMIDES.

The *Pharmaceutical Record* remarks that in Paris the pharmacists have of late been astonished by the increasing number of prescriptions they have been called upon to dispense wherein the bromides are combined with naphthol and bismuth. This new departure is simply the practical carrying out of some suggestions made last year by Professor Féré of the Salpêtrière, that large doses of the bromides tended, in certain individuals, to beget unpleasant symptoms chiefly for the reason that the gastro-intestinal tract of such persons was in a condition of sepsis that prevented the proper assimilation of the drugs. He recommended the administration of such intestinal antiseptics as naphthol and salicylate of bismuth as a means of removing drug intolerance from this and from other causes. The following formula is one method found by him to be advantageous, in the treatment of epileptics especially: \mathcal{R} Potassium bromide, $1\frac{1}{2}$ drachm; beta-naphthol, 1 drachm; salicylate of sodium, $\frac{1}{2}$ drachm. Mix and divide into three doses, one dose to be given three times daily. It is maintained by Féré that this treatment is curative as well as preventive. He has found that the eczema and psoriasis which sometimes follow in the train of borax will also disappear if the intestinal tract is rendered aseptic. To the formula above given some Paris physicians are in the habit of adding $\frac{1}{20}$ of a grain of sulphate of strychnine.—*N. Y. Med. Journal*.

POISONING BY SULPHONAL.

A writer in the *Med. Press and Circular* gives a caution regard-

ing the very indiscriminate use to which sulphonal is frequently put even by the laity. This drug was introduced about three years ago as a perfectly safe soporific, and corroborative testimony of this hopeful candidate have been abundant. Latterly there have been a few contrary reports about the safety and efficacy of the remedy, and the size of the maximum or poisonous dose could not be unanimously agreed upon. We have not a few cases on record where about three tablespoonfuls have been taken to produce sleep; in one of these cases the sleeper slept the greater part of five days and a half without permanent injury to his nervous system. Another person took a dose about one-third smaller, but never reawakened. A more unusual and extreme case has recently been reported by Dr. Ernest Neisser. A chemist's assistant, aged fifteen years, took with suicidal intent the contents of two boxes containing fifty grammes each, equivalent in all to three ounces, and over, of the fine pulverized sulphonal. The greater part of the drug was taken mixed with water, but some part of it was swallowed dry, and all of it was ingested within forty-five minutes. Six hours later he was found lying in a comatose sleep and sent to a hospital, where he lay five days and nights in an unconscious condition. On the sixth day the awakening process took place gradually and on the ninth day he was discharged cured; he was apparently perfectly recovered from all the after-effects of the enormous doses he had taken. In the great disparity of these recorded cases, we read the lesson either want of uniformity in the manufacture of the drug, or of an undiscovered "personal equation" in those cases where the comparatively small dosage resulted fatally. At all events, a certain amount of caution should be observed when ordering the drug for patients who have not heretofore been brought under its influence.—*The A. M. A. Journal.*

THE KNEE REFLEX IN EPILEPSY.

Dr. Vasilieff, though not the first to notice the fact that epileptic attacks exercise changes on the knee tendon reflex, has made a slight addition to our knowledge on the subject by a series of experimental investigations, carried on in the laboratory with the help of Marcey's chronograph and Bekhtereff's reflexograph, the subjects being dogs thrown into epileptic convulsions by electrica-

tion of the cerebral cortex. In the tonic period of the attack it was found to be impossible to excite the reflex, owing to the rigid state of all the muscles; in the succeeding clonic stage, however, the phenomenon was well marked. After a violent fit, accompanied by loss of consciousness, the tendon reflex was usually either entirely absent or very deficient in strength, the change occurring within a few seconds at the latest after the clonic spasms had ceased. The length of time during which the reflex was absent varied from one to twelve minutes, and it did not regain its normal force for a good while; in some cases not for a half an hour or more. Sometimes, however, after it had become normal, a temporary increase in the force of the reflex was observed. It has been noticed by Dr. S. N. Danillo, too, that the knee reflex was absent in dogs in which epileptiform fits had been produced by absinthe. Dr. Vasilieff thinks that these observations may be of value in diagnosing true from spurious epileptic attacks. His paper, as well as those by Professor Bekhtereff and Dr. Danillo, dealing with the subject of the knee reflex, are published in the *Vrach*, Nos, 16, 22, and 26, 1891.—*Lancet*.

THE TREATMENT OF CHRONIC ECZEMA BY CREOLIN.

Dr. R. Glasgow, in the *Dublin Med. Journal*, calls attention to the fact that the value of tarry preparations in many forms of skin disease—especially psoriasis and eczema—has long been recognized. "If I were required to name one remedy only for eczema," writes Mr. Jonathan Hutchinson, "I would choose tar; if allowed to choose two, tar and lead; and if three, tar, lead, and mercury;" adding his "belief that tar is the specific for all forms of true eczematous inflammations of the skin." The form in which he uses it, is the alkaline solution of coal tar known as *Liquor Carbonis Detergens*—a teaspoonful to a pint of warm water. The cost of this preparation debars its use in out-patient practice, and it was the cheapness of creolin and its excellent antiseptic properties that induced me a year ago to try its effects in the treatment of chronic eczema. A short experience satisfied Dr. Patteson that the most useful strength was that of one drachm of creolin to eight ounces of water—roughly speaking—a teaspoonful to a half pint of water. In this proportion, from which Dr. Patteson has never varied, it forms a bland and soothing

emulsion, milky in appearance, and with a strong tarry odor, which has a marked effect in allaying irritability and itching, prevents the formation of scabs and crusts, and appears in a striking manner to moderate the pus producing activity of certain forms of eczema. The mode of applying it which Dr. Patteson has found most efficacious is the following, which though applicable in the majority of instances, must yet, like every other remedy, be modified to meet individual cases.

The parts affected, having been freed from crusts or other accumulations, by appropriate means, should be freely bathed in the freshly-prepared emulsion for from ten to fifteen minutes. If the disease is in the acute stage, or if there is much secretion, lint soaked in the liquid may be applied over all parts, and retained in place by suitable dressings. But if the eczema is of the squamous type, treatment in the intervals is best carried out by means of ointments—that which has yielded in his hands the best results being one composed of zinc oxide, white precipitate, and the glycerine of the subacetate of lead. Under this treatment recent cases recover with astonishing rapidity, and even cases of long standing soon show signs of improvement which, in a majority of instances, goes on to complete and permanent recovery. In only a few instances has it failed to do more than alleviate the condition.

He has since tried the remedy in cases of scaly eczema and psoriasis with marked relief to the irritability and itching, but it is still too soon to form any judgment as to its curative powers. But in the infective pustular eczema it is an agent that effectually controls the process, and well deserves a trial on a larger scale. If we accept Unna's definition of eczema as "a chronic parasitic catarrh of the skin, with desquamation, itching, and the disposition to respond to irritation by exudation and well-marked inflammation," then we have a rational basis on which to ground our treatment by such an active germicide as creolin.—*Medical and Surgical Reporter*.

OBSTETRICS.

TORSION OF PEDICLE OF AN UNDIAGNOSED OVARIAN CYST IN
MONTH OF PREGNANCY.

Dr. Baudron (*Bull. de la Soc. Anat. de Paris*, April-March, 1891, pt. 10) describes a case where a patient, aged 28, was seized with violent pains in the left iliac fossa in the third month of her pregnancy. She had previously noted occasional pain in the same part. The whole abdomen was now swollen and tender. For a week the violent pains continued, becoming more severe at regular intervals, so that abortion was suspected. There was no rigors, no nausea, no vomiting. Diagnosis was very uncertain, parametritis, recto-uterine hæmatocele, and hydramnios being suggested by different observers. The uterus was of the size normally observed at the end of the seventh month, though, the menstrual history indicated that pregnancy had not advanced beyond the third. On the tenth day the patient vomited, the abdomen felt very tender, and intermittent pains had been continuing for a week. M. Polzi operated on the next day; digital exploration had proved that there was no evidence of threatened abortion. A dark liver-like body, fluctuating and adherent to the intestine, uterus, and great omentum, lay above the uterus, which was, as expected, gravid and at the third month of pregnancy. The body was punctured, and six quarts dark fluid, fœtid blood escaped. The body was the left ovary, cystic, and with a large pedicle twisted three times from right to left. This pedicle had been detected by palpation a few days previously, and taken for ectopic pregnancy in a rudimentary uterine cornu. The pedicle was ligatured and the tumor removed, the peritoneum flushed, and the wound closed, excepting at the inferior angle, where a strip of iodoform gauze was passed into Douglas' pouch. Abortion took place next day, and a dead macerated fœtus was expelled, without flooding. Three hours later, as the patient was asking for some drink, she was seized with a fatal attack of syncope.—*Brit. Med. Jour.*

APIOL IN MENSTRUAL DISTURBANCES.

Dr. Delmis (*Progres Medicale*) has investigated the action of

apiol in disturbances of menstruation. Apiol is an oily, and very odorous fluid, which was discovered in 1849 by Joret and Homolle, who had expected much of this substance, thinking to find in it a substitute for quinine. Its emmenagogue action was also known to them, and it is that which Delmis writes on. Its action on the uterus may well be compared with that of digitalis on the heart. It is indicated not only in amenorrhœa and dysmenorrhœa, but also in metrorrhagia. In dysmenorrhœa one may begin the treatment by giving, mornings and evenings, one capsule of twenty centigrammes (three grains) as near the period as possible and continuing it as long as it lasts, *i. e.*, three to four days. At the next period the remedy is again given, and even a third time, yet two times generally suffice. No especial method of procedure is given in amenorrhœa. It is, of course, important to have a pure preparation. Impure preparations are in the market.—*Cin'ti Lancet-Clinic.*

MORBID CHANGES IN FALLOPIAN TUBES IN ACUTE INFECTIOUS
FEVERS.

Dr. Dmitry D. Popioff, St. Petersburg, has examined (*Vratch*, 1891) twenty Fallopian tubes from ten women who died from relapsing fever (7), relapsing fever with croupous pneumonia (1), typhoid fever (1), and croupous pneumonia (1). In all the cases the epithelial lining of the oviducts showed more or less extensive desquamation, the whole lumen of the tube being sometimes blocked by enormous masses of epithelium cells lying in heaps or rows about the base of the folds of the mucous membrane. The outlines of the detached elements were irregular, the protoplasm opaque and granular, the nuclei staining badly or not at all. Amidst the cells there were frequently seen structureless masses of varying size and appearance, which were stained with hæmatoxylin fairly uniformly. Sometimes there were also small heaps of red blood corpuscles, and still smaller ones of leucocytes. In the outer or abdominal portion of the tube the desquamation and accumulation of the corpuscles were always much more pronounced than in the inner or uterine end. The tubal capillaries and small veins were invariably engorged with blood, even large-sized veins being occasionally entirely blocked with blood corpuscles. The congestion was especially marked in the mucous, subserous, and

longitudinal muscular coats. In two of the ten cases the latter strata contained scattered accumulations of red blood corpuscles, while in the remaining cases the elements were lying singly, being scattered all over the mucous, subserous, and, more rarely, the muscular coats. As a rule, the corpuscles were seen in the vicinity of the engorged vessels, but uncommonly they were also met with in nonvascular areas. In some cases a fairly abundant leucocytic perivascular infiltration was also detected, though more frequently the lymphoid elements occurred in much more scanty numbers than red blood corpuscles. In climacteric cases the congestion, as well as all other morbid alterations, were as intense as in sexually active women. It was noticed, further, that in protracted cases the inflammatory changes were more intense than in those of shorter duration, and that in the presence of croupous pneumonia they attained a higher degree than in the case of a noncomplicated relapsing fever.—*Brit. Med. Jour.*

THE MANAGEMENT OF OCCIPITO-POSTERIOR POSITIONS.

Zinke (Cincinnati) has an interesting paper* embodying the report of a case of what he believes to have been a primary occipito-sacral, or what the older writers classify as a sixth, position. Traction with forceps completely extended the head, and it was born as a face by flexion without laceration of the soft parts.

Primary occipito-sacral positions are of rare occurrence, and by many writers are believed never to occur; Madame Boivin is credited with having seen two cases; Naegele and Meigs each two, and Dewees three. Certainly such cases are of such rarity as to make it inexpedient to cumber obstetric nomenclature with a classification of them among the usual positions. Whether primary or secondary the management of all posterior positions of the occiput is essentially the same, intelligent and skillful effort must be invoked to promote anterior rotation; and, failing this, the head must be extracted as nearly as possible in a condition of perfect flexion to secure the engagement at the outlet of a favorable diameter, or else the head should be completely extended and delivered as a face, as was done in Zinke's case.

In his remarks on the general management of occipito-posterior

*American Journal of Obstetrics, January, 1891.

positions, Zinke gives prominence to one expedient, which, although known and practised by many, is not, it is believed, thoroughly appreciated. When it is evident that anterior rotation will not take place, and the head has become arrested, Zinke recommends introducing the hand into the vagina under complete anæsthesia, siezing the head and rotating into an O. L. A. or O. D. A. position, according to its original engagement, and holding it there until it is fixed in its new position. This procedure has never failed in Zink's hands, and it has served the reporter well in a number of cases. To insure success in this manipulation, however, the reporter has found it important to promote simultaneously, the anterior rotation of the child's body also, either with the disengaged hand or with the aid of an assistant, by external taxis through the abdominal wall.

Blanc (Lyons) published* in 1887 three cases, and later two cases, in which manual rotation of the persisting posterior occiput was successful. Subsequently he reported† two cases in which, although manual rotation was accomplished without difficulty, the head returned to its former position when released by the hand. In both these cases the pelvis was faulty—in the one case funnel-shaped, in the other a simply flat. Possibly, Blanc did not, in these cases, secure by external manipulation anterior rotation of the body. At all events manual rotation is almost always successful and is unattended with danger in skillful hands.—*Boston Med. and Surg. Journal.*

*Lyon Medical, 1887, Nos. 3, 6 and 8.

†Arch de Tocologie, 1888

Editorials, Reviews, Etc.

PUBLISHER'S NOTICE.—The JOURNAL is published in monthly numbers of *Forty-eight pages*, at one dollar a year, to be always paid in advance.

All bills for advertisements to be paid quarterly, after the first insertion of the quarter.

Business communications, remittances by mail, either by money-order, draft, or registered letter, should be sent to the Editor, C. S. BRIGGS, M. D., Cor. Summer and Union Streets, Nashville, Tenn.

All communications for the JOURNAL, books for review, exchanges, etc., should be addressed to the Editor.

THE CONGRESS OF AMERICAN PHYSICIANS AND SURGEONS.

The meeting in Washington, during September, of this Congress, composed of the various special associations of the different branches of medicine and surgery, each of which is a distinct and separate body of specialists, was characterized by everyone as a notable success. During the meeting the several associations met, read and discussed papers, and transacted business in the mornings, while the afternoons were devoted to general meetings for the purpose of hearing selected addresses.

The attendance was good, all parts of the United States being represented. A number of distinguished foreigners were present and took part in the discussions. The character of papers presented was far above the average. There can be no doubt but that the majority of the papers presented will be read with the greatest interest by the entire profession and that most of them, emanating as they do from industrious workers and hard thinkers, will carry more weight than any series of papers ever read at a scientific meeting of the kind.

HYGIENE AT THE PAN AMERICAN CONGRESS.

The Canada *Health Journal* in speaking of the organization of the Inter-Continental American Medical Congress expresses the hope that the Committee having the matter in hand and that is to meet at St. Louis, October 17th, will arrange to give abundance of time to subjects on preventive medicine. "We would suggest that the relations of the profession to the public be a special subject, with a view of bringing about a different line in the general practice of medicine, as distinct from surgery, whereby the public may be encouraged to look more to the physician as the guide to the prevention rather than the cure of disease, which would be not only easier for the profession but for which the public could afford to pay much better than in the present line of practice."

The 19th annual meeting of the American Public Health Association, will be held at Kansas City, Oct. 20th to the 24th. The Local Committee of Arrangements announce that all the Railway Passenger Associations of the country have granted a one and one-third fare rate for the round trip on the usual certificate plan, that is,

1st, Procure a certificate of attendance from the agent at the starting point by paying full fare to Kansas City.

2d, Have the certificate of attendance signed by the proper officer of the Association at Kansas City. This certificate will then procure a return ticket for one-third fare. All the leading hotels of Kansas City will give special rates to delegates. Arrangements are being perfected for an excursion into Kansas, as one of the features of the entertainment of the Association. For any information as to the meeting address Dr. E. R. Lewis, Chairman; or Dr. Joseph Sharp, Local Committee of Arrangements, Kansas City, Mo,

The College of Physicians and Surgeons of Chicago has provided a non-resident course of instruction by means of which students can matriculate at the college and follow out a prescribed course of study at home under the guidance of a preceptor; the year's study and examinations to take the place of one year's study in a four years' course. If practicable, the plan is a good one as it enables the student to prepare himself for college in the most thorough manner. More information can be obtained by those interested by applying to the Secretary of the College.

The opening exercises of the Medical Department of the University of Nashville and Vanderbilt University were held in the College Hall Oct. 5th. Addresses were made by Chancellor Payne, President Maddin and others of the faculty. The beginning of the term gives promise of a prosperous year, more students having matriculated on the opening day than at any previous session. Two hundred and fifty students have registered, so that a class of fully three hundred and fifty may be safely expected.

We beg to remind our readers who are still in arrears that the year is drawing to a close, and hope they will respond to the demand enclosed in the last issue of the JOURNAL in the shape of statements of indebtedness. Take the time and trouble, gentlemen, to liquidate this small indebtedness without delay. We earnestly hope everyone who is behind in his subscription will pay up without the necessity of further reminders.

Our readers will notice the advertisement of the Infirmary of Drs. W. T. & C. S. Briggs, which appears in this issue. Patients who come to this city for treatment of surgical diseases, can obtain all the advantages offered by first-class infirmaries in this handsomely equipped private hospital. Perfect surgery can be done only in an institution of this kind, and all who visit this Infirmary agree that it is complete in its appointments.

Prof. W. L. Nichol is back from a most enjoyable trip to Europe.

Prof. W. T. Briggs, his many friends will be glad to learn, has fully recovered from his recent severe illness, and is able to attend to business again.

The death of the efficient health officer of Davidson County, Dr. John W. McAllister, occurred recently near this city. The physicians of this city met and passed resolutions of respect. Dr. McAllister was a graduate of the Medical Department of the University of Nashville and Vanderbilt University, and for a number of years practiced with much success in this city. He was County Health Officer, and in the duties of that responsible position gave universal satisfaction. He was a popular, affable gentleman, a competent and painstaking physician, and was highly esteemed by all who knew him.

To the Readers of the Nashville Journal of Medicine and Surgery:

The Mississippi Valley Medical Association will hold its seventeenth annual session at the Pickwick Theatre, Washington and Jefferson Aveuues, St., Louis, October 14th, 15th, and 16th. A full programme of interesting papers has been prepared and provision has been made for the fullest, freest and most complete discussion of the same. Representative men from the various sections of the country have been invited to open the discussions. The local profession of St. Louis is a unit to the end that every visiting physician shall be received and welcomed in a regular, warm-hearted St. Louis style.

The same qualifications are requisite for membership in this Association as for the American Medical Association, the forme

being subordinate to the latter. If eligible, you and your friends, together with your wives and families, are most cordially invited to visit St. Louis and enter into the scientific work and the social pleasures as you may desire.

I. N. LOVE, M. D.,

Chairman, Committee of Arrangements.

PRELIMINARY ANNOUNCEMENT OF PROGRAMME
FOR THE 17th ANNUAL SESSION OF THE
MISS. VAL. MEDICAL ASSOCIATION.

To be held in St. Louis, Mo., October 14th, 15th and 16th, 1891.

1. The Toxic Effect of Tobacco Vapor; with Report of Cases. Carroll Chapman, M.D., Louisville, Ky.
2. The Management of Chronic Diseases. S. Baruch, M.D., New York, N. Y.
3. The Ethics of Curing Consumption and other Chronic Diseases. John Ashburton Cutter, M.D., New York, N. Y.
4. The Treatment of Typhoid Fever. Robert C. Kenner, M.D., Louisville, Ky.
5. The Carbolates. William. F. Waugh, M.D., Philadelphia, Pa.
6. On Degenerative Processes in the Spinal Cord, Consequent upon Constitutional Diseases. Hugo Summa, M.D., St. Louis, Missouri.
7. Iliac Indigestion—Intestinal Dyspepsia—and its Treatment by Antiseptic Agents. Frank Woodbury, M.D., Philadelphia, Pennsylvania.
8. The Influence of Graveyards on Public Health. J. W. Carhart, M.D., Lampasas, Texas.
9. Rheumatism and Gout in their Casual Relation to Eczema; their Management. A. H. Ohman-Dumesnil, M.D., St. Louis, Missouri.
10. The Value of Epilation as a Dermato-Therapeutic Measure. Joseph Zeissler, M.D., Chicago, Ill.
11. Gradation of Lenses. Dudley S. Reynolds, M.D., Louisville, Ky.

12. The Influence of Alcohol on Vision. Francis Dowling, M.D., Cincinnati, O.
13. Tobacco and Insanity. Ludwig Bremer, M.D., St. Louis, Missouri.
14. The Present Aspect of Cerebral Surgery. Landon Carter Gray, M.D., New York, N. Y.
15. Forensic Aspect of Bruises and Fractures in the Insane. J. G. Kiernan, M.D., Chicago, Ill.
16. Amputation of the Scrotum, with Report of Case. B. Merrill Ricketts, M.D., Cincinnati, O.
17. Observation on Urethral Stricture. G. Frank Lydston, M.D., Chicago, Ill.
18. The Mechanical Element in Treatment of Compound Fracture. Warren B. Outten, M.D., St. Louis, Mo.
19. A Report of a Case of Retention of Urine caused by Multiple Urethral Calculi. J. V. Prewitt, M.D., West Point, Ky.
20. Some Observations on Rectal Surgery in Europe. Leon Straus, M.D., Louisville, Ky.
21. A New Method of Diagnosing Obstruction in the Sigmoid Flexure. Joseph M. Mathew, M.D., Louisville, Ky.
22. Pathology and Surgical Treatment of the so-called Strumous Inguinal Lymphadenitis. L. T. Riesmeyer, M.D., St. Louis, Missouri.
23. The Treatment of Gonorrhœa. E. C. Underwood, M.D., Louisville, Ky.
24. Extripation of the Thyroid, with Report of Case. Emory Lanphere, M.D., Kansas City, Mo.
25. Are Conservative Amputations always in the Interest of the Patient? Charles Truax, Chicago, Ill.
26. Sarcoma of the Dorso-Scapular Region—Operation—Recovery. George N. Lowe, M.D., Randall, Kansas.
27. Mouth Breathing. Eric E. Sattler, M.D., Cincinnati, O.
28. Empyema of the Superior Maxillary Antrum, with only Nasal Symptoms. Hal Foster, M.D., Kansas City, Mo.
29. A Superior Remedy for Nasal Catarrh; Campho-Menthol. Seth S. Bishop, M.D., Chicago, Ill.
30. A Case of Reflex Aphonia; Demonstrated to be due to Pressure of the Middle Turbinate against the Septum Nasi. Hanau W. Loeb, M.D., St. Louis, Mo.

31. Importance of recognizing a Temporary Rachitic Condition in Infants. John A. Larabee, M.D., Louisville, Ky.
32. A Pathological Study of Pelvic Inflammation in Women. Wm. Warren Potter, M.D., Buffalo, N. Y.
33. Observations on the Management of Uterine Tumors. C. A. L. Reed, M.D., Cincinnati, O.
34. Complications Following Abdominal Section. Rufus B. Hall, M.D., Cincinnati, Ohio.
35. Obstetric Dispensaries; their Management. L. A. Berger, M.D., Kansas City, Mo.
36. Surgical Treatment of Peritonitis. A. V. L. Brokaw; M.D., St. Louis, Mo.
37. Temperature no Guide in Peritonitis. H. C. Dalton, M.D., St. Louis, Mo.
38. Some Monstrosities at and after Birth. David S. Booth, M.D., Belleville, Ill.
39. Oophorectomy *vs.* Donothingism. Willis P. King, M.D., Kansas City, Mo.
40. A Successful Gastrostomy for Impermeable Stricture of the Cardiac End of the Œsophagus—Subsequent Dilatation of the Strictures. Arch. Dixon, M.D., Henderson, Ky.
41. The Nervous Equation of Pelvic Inflammation. George F. Hulbert, M.D., St. Louis, Mo.
42. Hysterectomy for Cancer. J. M. Richmond, M.D., St. Joseph, Mo.
43. The Application of the Obstetrical Forceps. John Bartlett, M.D., Chicago, Ill.
44. Appendicitis. W. H. Link, M.D., Petersburg, Ind.
45. Phthisis—Beginning its Treatment. Edward F. Wells,
46. The Hydrotherapy in Typhoid Fever. H. H. Middlekamp, M.D., Warrenton, Mo.
47. Hystero-Epilepsy. Howell T. Perching, M.D., Denver, Colorado.
48. Importance of Definite Strength in Mineral Waters. G. F. Hulbert, M.D., St. Louis, Mo.
49. The Time and Place for Stimulants. Chas. H. Hughes, M.D.

Regular classified programme will be issued and sent to members and the profession generally at an early date. Titles to pa-

pers must be sent to Chairman of Committee of Arrangements before October 5, 1891.

I. N. LOVE, M.D., Chairman,

Committee of Arrangements,

Grand and Lindell Avenues, St. Louis, Mo.

E. S. MCKEE, M.D., Secretary.

C. H. HUGHES, M.D., President.

BOOKS NOTICES.

A TREATISE ON THE DISEASES OF THE NERVOUS SYSTEM. By William A. Hammond, M.D., Surgeon-General U. S. Army (retired list); late Professor of Diseases of the Mind and Nervous System in the College of Physicians and Surgeons of New York, the Bellevue Medical Hospital College, the University of the City of New York, and the New York Post-Graduate Medical School and Hospital, etc. With the collaboration of Græme M. Hammond, M.D., Professor of Diseases of the Mind and Nervous System in the New York Post-Graduate Medical School and Hospital; Fellow of the New York Academy of Medicine; Member of the New York Neurological Society; of the American Neurological Association, etc. With One Hundred and Eighteen Illustrations. Ninth Edition, with Corrections and Additions. New York. D. Appleton and Company. 1891.

No work ever published upon this subject has met with such success as this. This, the ninth edition, has been brought fully up with the times. The distinguished author has been assisted in the preparation of this edition by his son, Dr. Græme M. Hammond, who has already achieved an enviable reputation in the department of nervous diseases. The work is too well known to the profession to require more extended notice; the simple announcement of its appearance in a new edition being all that is necessary. The work is as necessary to the practitioner as Gray's Anatomy is to the medical student.

PRACTICAL PATHOLOGY AND MORBID HISTOLOGY. By Heneage Gibbs, M.D., Professor of Pathology in the University of Michigan; Formerly Lecturer on Normal and Morbid Histology in the Medical School of the Westminster Hospital, London; Formerly Curator of the Anatomical Museum, King's College, London. Philadelphia. Lea Brothers & Co. 1891.

This volume contains much that serves to commend it to the favorable notice of the medical profession. The important subject is brought fully up with the most recent advances. All the details of practical work in this department are given in the most lucid manner, so that as a guide it will prove exceedingly valua-

ble. The value of the work is greatly enhanced by the numerous illustrations of morbid tissues displayed. These photo-engravings are particularly accurate and impart to the work advantages not possessed by any other method of illustration. The section on Practical Bacteriology contains all the instruction necessary for enabling the student to study microscopically the various micro-organisms; their appearances, growth and action on animals by inoculation. The work is a model of the kind, and deserves the fullest patronage of the medical-student world.

MINOR SURGERY AND BANDAGING, including the Treatment of Fractures and Dislocations, Tracheotomy, Intubation of the Larynx, Ligations of Arteries and Amputations. By Henry R. Wharton, M.D., Demonstrator of Surgery and Lecturer on Diseases of Children in the University of Pennsylvania, Surgeon to the Presbyterian Hospital, the Methodist Episcopal Hospital, the Children's Hospital, and the Drexel Hospital for Children; Consulting Surgeon to the Rush Hospital for Diseases of the Chest, etc. With Four Hundred and Three Illustrations. Philadelphia. Lea Brothers & Co. 1891.

This work treats of bandaging, dressings, and minor surgery and ligation of arteries and amputations. It is a very well prepared manual of the kind, though we think the consideration of ligations and amputations somewhat out of place in a text-book of this kind. The chapters on bandaging are especially good. The illustrations are from photographs of the applied bandage. We would not, however, advise the student to follow the author's method of making reverses as shown in Figure 8, as that cut shows the thumb placed near the inferior instead of the superior edge of the bandage, which is a well-known fault with beginners. The book will serve admirably, however, as a guide, and we shall take pleasure in recommending it to the class now in attendance upon lectures.

THE POCKET ANATOMIST. Founded upon Gray. By C. Henri Leonard A.M., M.D., Professor of the Medical and Surgical Diseases of Women and Clinical Gynecology, in the Detroit College of Medicine. Fourteenth revised edition, containing Dissecting Hints and Visceral Anatomy. Detroit, Mich., 1891. The Illustrated Medical Co. Publishers. Cloth, 297 pages, 193 Illustrations; price, post-paid, \$1.00.

This book is issued on thin, though nicely glazed paper, and takes up but little room, though 300 pages in thickness. The plates introduced are photo-engraved from the English edition of

Gray, and are therefore exact; most of them are full-paged, and where they are not, they are grouped together so as to save as much thumbing as possible. The useless "questions" are absent in this work, and their room given to needed illustrations or terse descriptions of the minor parts found in the several dissections made. The chapter given to "dissection hints" gives the lines of incision necessary to best expose the underlying organs, arteries, nerves, or muscles. The chapter on Gynæcological Anatomy can be found only in the more expensive work of Savage. The pronunciation of each anatomical term is given, be it artery, vein, nerve, muscle, or bone. Over 100 pages are devoted to the anatomy of the special organs and viscera. The book has been honored by a re-print in England after some three thousand copies had been sold over there by the American publishers.

DISEASES OF THE NASAL ORGANS AND NASO-PHARYNX. By Whitfield Ward, A.M., M.D., ten years Surgeon to the Metropolitan Throat Hospital, late Clinical Assistant to the London Throat Hospital, Member of the N. Y. County Medical Society, etc. G. P. Putnam's Sons, 27 West 23rd Street, New York; 27 King William St., Strand, London. The Knickerbocker Press. 1891.

This is an excellent hand-book for the physician. The frequency with which diseases of which it treats is met in general practice is sufficient reason for its publication. It is exceptionally well arranged and illustrated. The work is certainly one of the best of its class and deserves the fullest patronage of the profession.

3000 QUESTIONS ON MEDICAL SUBJECTS, arranged for Self-Examination, with the Proper References to Standard Works in which the Correct Replies will be found. Philadelphia, 1891. P. Blakiston, Son & Co., 1012 Walnut St.

This is a most useful book for the use of students. It is provided with 3000 questions bearing upon all the branches of medicine, and is intended for self-examination as well as examination of others. References to certain popular text-books are given so that the correct answers can be easily found. Such a manual will prove exceptionally valuable to students.

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Original Communications.

CONTINUED FEVERS OF THE SOUTH.

BY FRANK HUMPHREYS, M.D., HAWKINS, TEXAS.

Dr. J. H. Musser, of Philadelphia, who was Chairman of the Section of Medicine at the Nashville meeting of the American Medical Association, deserves much credit for the untiring interest he manifested in bringing this topic before that body for discussion. Although the subject was discussed and a committee appointed to make a collective investigation, and report at the next meeting of the Association, it is to be regretted that so little interest has been manifested on the subject.

Dr. Joseph Levi, of Colon, U. S. of Columbia, in the *Satellite*

of the *Universal Medical Sciences* for June and July, 1891, contributes an interesting article on the "Fevers of the Isthmus of Panama."

The Isthmus being situated between the eighth and tenth degrees of latitude, is strictly a tropical climate, where we should expect to find malarial fevers rife and of the most pernicious character, and such is the case. Although the climate is so much hotter than that of the Southern States, there is nevertheless a striking similarity of the fevers of the former country to those of the latter, which we readily recognize in reading the historical sketch of Dr. Levi, who enumerates the following types:

1, Intermittent Malaria; 2, Remittent; 3, Chronic Malarial; 4, Pernicious Malarial; 5, Yellow Fever. The last being seldom seen now on the Isthmus, which the author attributes to improvements in sanitation.

In the writer's outlines of the remittent fevers of Colon (Aspinwall) a likeness to our continued fevers may be observed, except that in the former the maximum temperature of 109° F. is seldom if ever seen here. The duration of the remittent fever of the Isthmus is from nine to twenty-four days, while our remittents are usually controlled in a week or ten days. Our continued fevers run a course of not less than fourteen days, and more frequently from eighteen to twenty-one days; or, occasionally, from one to three months. These cases resemble the pernicious fevers of the Isthmus, except the delirium, concerning which Dr. Levi observes:

"A case of pernicious fever as seen here, as a rule, attacks a stranger who has been for days and days getting fever, and has been treating himself with quinine, either in too large doses or much too small ones. Suddenly he finds himself with an increasing fever that never leaves him. He loses appetite and is prostrated with debility, which gives place to low and muttering, or, at times, wild delirium. The symptoms, as they develop, resemble typhoid fever, and for this reason many physicians call it typho-malarial fever. I have seen many post-mortems in these cases, but have never observed the characteristic lesions of typhoid—ulceration of Peyer's patches, erosion, beard-appearance, etc."

Now, in this particular type of fever that is said to resemble

typhoid in the low mutterings or wild delirium, which, in Colon and Panama, as elsewhere, has been designated as typho-malarial fever, there has been no evidence to justify the diagnosis. The absence of the enteric lesions of typhoid, as verified uniformly at the autopsy dispels all doubts on that point, showing that this type belongs to some other class and should, perhaps, be referred to that group recognized as continued malarial fever.

"In very many cases of pure remittent fever," says Dr. Levi, "all the quinine given will not reduce the temperature entirely, especially the first day or two. In a pure case of remittent fever, pyrexia is always to be found, and the thermometer shows this to be the fact. This fever, if it is to terminate favorably, is gradually reduced day by day. Every day the temperature falls from $\frac{1}{2}^{\circ}$ to 1° F. The fever is never absent. Each day the attack returns later and not as severe—that is, no fever for two days, then a little, or once in four days, or once a week, until none at all. Quinine in proper doses, and at correct intervals will be quite sufficient. . . . Keep the fever under control, but do not attempt to use powerful or severe measures."

The foregoing descriptive outline of the remittent fever of the Isthmus shows that the fever is purely malarial of a continued type, and although the fever cannot be aborted by means of quinine, it can be controlled to a certain extent, and the pernicious character of the fever is greatly abated so that the patient is enabled to tolerate it until it runs its course, which, without quinine, would doubtless be more severe and of greater continuity. Its similarity to our continued fever is apparent.

In the chronic malarial fevers of the Isthmus of Panama there seems to be a similarity to certain forms of malarial fever met with in the Southern States. There is hæmaturia in some of the cases on the Isthmus. It seems to be chronic, and Dr. Levi says: "Quinine alone cannot cure the severe cases seen here." It is to be regretted that the writer has had not more fully described the character of the hæmaturia. He says, however: "When the results of malaria, hæmaturia is very severe and debilitating, patients have during one night lost so much blood that they could not get out of bed next morning." Dr. Levi seems to think that this prostration is due rather to the moral effects of seeing the blood, more than it is a result of the amount lost. This is hardly

probable; for, if the hæmaturia there, as here, is due to chronic malarial imprisonment, it is malarial hæmoglobinuria, the effects of which are exceedingly prostrating, as I have observed in a large number of cases during the past twenty years. In further confirmation of which I may be permitted to remark that I have myself had three such attacks during three consecutive years, to which I have elsewhere referred. But we rarely, if ever, have hæmaturia during the progress of our continued fevers.

The onset of this form of malarial fever is always sudden and violent, completely prostrating the patient, whose life is always greatly imperiled by such an attack. Quinine does not cure this form of fever here, nor does it check the hæmaturia. After the hæmaturia is ushered in, there is positively no need of giving quinine to prevent another paroxysm, *for there will not be another paroxysm if quinine be withdrawn from the patient.* Here the hæmaturia rarely, or never, occurs except in persons taking quinine to arrest an apparent intermittent fever, and is seen after a few paroxysms. The chill or rigor which ushers in the hæmaturia is always the last or final paroxysm—unless the quinine treatment is persisted in, which not infrequently results in repeated paroxysms. Many practitioners, otherwise intelligent, have thus persisted in efforts to forestall an anticipated paroxysm which would never have occurred had they really known that malarial hæmaturia, so-called, is a disease of *one paroxysm only*, that is, the chill or rigor which ushers in the malady is *the last*, if quinine be promptly withdrawn. It is an exceedingly fatal disease here, and quinine is contra-indicated after the hæmaturia sets in.

The metrorrhagia and dysmenorrhagia, as observed on the Isthmus of Panama by Dr. Levi, is probably nothing more nor less than hæmoglobinuria—the result of malarial toxæmia.

There is only one more item in Dr. Levi's paper to which I wish to refer, and that is in regard to the use of antipyrin in malarial fevers. While I agree with the writer that antipyrin does not cure a purely malarial fever, I am not prepared to admit that the drug has the power or property of converting an intermittent into a remittent or continued fever.

Referring to this matter, Dr. Levi observes: "If given to reduce temperature it does so, but quinine then fails to act as it should, or as it did before, for some days after. I have, for ex-

ample, given a dose, say of 15 grains, of antipyrin to a fever patient—intermittent—and it has changed the fever to a remittent or continued fever. If the temperature was 104° F., and the drug was given for its diaphoretic action, and to relieve the intense headache, pains in the back, limbs, etc., the patient after one or two doses of the medicine feels better. He is not so uncomfortable, his skin is cool and moist, yet the fever returns the next day stronger, and the pain is more severe. Quinine now does not act at all or as well, or the dose must be larger than usually given at the beginning of such cases. Now, if quinine had been given from the start, or alone, and its slower action waited for, the fever would, or might have been, cured permanently; or if the fever did return it would not have returned so quickly. I have seen a second attack of fever come on in the morning early when antipyrin has been given the evening before. In most of the cases quinine would have aborted a second attack for a longer period if not combined with the antipyrin . . . It has caused the fever to remain for hours and hours after it has apparently broken the first paroxysm. . . . It is a good medicine to reduce a high temperature of, say, 106° to 107° F., but to give it in every case of malarial fever, with the usual temperature of 104° to 105° F., is, in my opinion, not advisable. As a neurotic symptom medicine in chronic malarial toxæmias, it is of service and not dangerous in most cases.”

I have quoted thus freely from Dr. Levi’s paper in order to correctly state his position, and because he has given expression to an opinion in regard to the action of antipyrin in malarial fever which seems to be entertained by a number of reputable practitioners elsewhere, whether the opinion is practically correct or not. With these I have no controversy; nevertheless, I will refer to the subject briefly.

As the fevers of the Isthmus, already enumerated, are, for the most part, purely malarial, they do not perhaps differ materially, except in degree, from the same class of fevers elsewhere. It seems reasonable, therefore, to suppose that the behavior of antipyrin in the malarial fevers of the Isthmus of Panama is not different from its action in the same class of fevers in all tropical and subtropical latitudes.

That antipyrin has a positively known tendency to convert an

intermittent into a remittent or continued fever seems improbable for several reasons:

First. The several distinct types of malarial fevers do not, as a rule, change from one type to another. An intermittent fever usually begins, continues and ends as such. Remittent fevers, as a rule, can be readily arrested in a few days, or a week or so at most, by specific (quinine) treatment. The continued type, which at first seems to be nothing more than a mild remittent fever, is a distinct type from either intermittent or remittent fever. These have a more violent and abrupt onset, with more gastric and nervous disturbances, and a higher temperature at the beginning than the continued fevers. While an intermittent usually begins, continues and ends as such. Maury has very truly observed that our continued malarial fever "begins, continues, and ends as a continued fever." This observation was made by the above distinguished authority before antipyrin and the other modern antipyretics came into use. Hence, antipyrin cannot be justly charged with having produced the continued type of malarial fever which prevailed before the drug was known. Many other accurate observers had likewise called attention to this type of continued fever, which prevailed in the Southern States before antipyrin came into general use.

Secondly. In these cases where it is said that "the fever has continued for hours and hours after it (antipyrin) had apparently broken the first paroxysm," it is reasonable to suppose that the medicament should have been continued longer or in larger doses; and, if the fever was of a periodical type, it is even possible that there was some neglect in administering quinine in sufficient quantity at the proper time.

Thirdly. The majority of practitioners who have used antipyrin in malarial fevers will, I am persuaded, testify to its usefulness during the pyrexia, without any perceptible tendency to increase the continuity of the fever. If a temperature of 104° to 105° F. does not call for antipyretics, then we must admit that they are exceedingly rarely, if ever, required in malarial fevers. Dr. Levi advises antipyrin only when there is a hyperpyrexia of 107° to 109° F. Such a temperature, it seems to me, is altogether too great to be treated by antipyretics alone, as it might require toxic doses to reduce the hyperpyrexia, which might more safely

be accomplished by means of the cold bath as an adjuvant. A pyrexia of 104° to 105° F., if permitted to continue long, must, without doubt, produce very disastrous effects.

Sometimes we encounter cases so overwhelmed with the effects of the malarial poison there is no time to be lost in bringing the patient immediately under the influence of quinine, lest the next paroxysm prove fatal. Here we may wisely ignore all antipyretics except quinine, which proves to be "the one thing needful"—fulfilling the role of antipyretic and antiperiodic at one and the same time (*Medical and Surgical Reporter*, May 7, 1890, page 658).

During the present season I have treated patients presenting the more common types—intermittent, remittent, and continued. The first and second types readily yielded to quinine, as usual, albeit antipyrin was administered during the pyrexia. As already stated, the differential diagnosis in all of these cases is made without great difficulty; and, whether the patients receive antipyrin or not, the intermittent and remittent fevers readily yield to quinine, while the continued type runs its course in spite of all remedies, but it is apparently influenced for good by the judicious use of antipyrin and quinine.

It is not always an easy matter to decide just to what extent the pathological condition is referable to natural causes, or how far the malady may be diverted from its natural course through disturbances of metabolism due to the pathogenesis of drug action. Although this is a subject calling for the most careful investigation, it is no longer a question with me whether I will give a fever patient antipyrin, when the temperature ranges between 104° and 106° F. I have long since decided for myself that a pyrexia of that character, if permitted to continue long, will prove to be far more harmful than antipyrin—unless there is some special contra-indication of this drug.

Quinine has probably had more influence than usual upon the continued fevers as they have prevailed here this season; not that it has abridged their course to any considerable extent, but the temperature has been seemingly controlled to a greater extent than formerly, the drug having apparently forestalled hyperpyrexia, while the fever under its influence has run a milder course without much discomfort to the patient. This may possibly be due, in a measure, to the manner in which the drug was admin

istered. Instead of a few grains every three or four hours, as usual, about twenty grains, divided into three doses were given at 2, 4, and 6; or, 4, 6, and 8 a. m., as in remittent fever. Under this method of administration the morning temperature was from 100° to 101° F., while the evening pyrexia was usually $102\frac{1}{2}^{\circ}$ to $3\frac{1}{2}^{\circ}$ F., which was reduced about 2° or 3° F., by one or two doses of ten or fifteen grains of antipyrin. This was generally sufficient to give relief from nervous disturbances and secure ample repose during the night, without having to resort to hypnotics. The brief outlines of a few clinical cases will show the results of the foregoing method of treatment.

After a futile effort to prevent the development of a continued fever in an able-bodied young man, aged about 25 years, who had been having fever daily for a week, I was called to the case and made efforts for several days to arrest the fever, but failed to do so. The quinine was now suspended until the morning of the thirteenth day, when it was resumed and given as already indicated, and repeated on the morning of the fourteenth day in view of the approaching septenary period. The temperature on the fourteenth was nearly normal. On the morning of the fifteenth day no quinine was given, and in the evening the temperature bounded up to 105° F. From this time on quinine was given as before, and the fever gradually declined in a few days. Quinine in this case seemed to be beneficial in preventing the tendency to hyperpyrexia.

This young man made a satisfactory convalescence; but in about ten days or two weeks afterwards he went fishing in the middle of July, and exhausted himself walking. He took a relapse of the fever which ran a course almost precisely as the first attack in about the same time with the same treatment. His appetite was usually good, and the milk diet, with animal and vegetable soups, proved quite sufficient to keep him well nourished. Iced lemonade and milk punch entered into his daily menu. Several times a day he was allowed either a plain or lemon toddy as he preferred. Quinine, in this case, seemed to be beneficial in preventing the tendency to hyperpyrexia. There was no time during either attack when it was deemed necessary for any one to sit up at night with him. He was able at all times to take his food and medicine without assistance; was always cheerful, bright

and hopeful. He manifested much concern in regard to the progress of the fever, and was always anxious to know his temperature when the thermometer was applied.

At the hotel where this gentleman boarded was a very delicate lad, aged six years, who had been treated a week by his father, proprietor of the house, who had endeavored to arrest the fever, which proved to be another case of a continued type. I was called to take charge of the case; and applied a treatment similar to that just detailed. This was a more severe attack than the preceding one, and required constant and careful nursing. There was a troublesome diarrhœa, which was probably due to drastic purgatives, given before I was called to treat him. The fever declined about the eighteenth day; convalescence was uninterrupted and satisfactory.

There was another similar case to this—in a man living in another part of the town, whose well had supplied water for two persons who had died last year of typhoid fever. He had a mild type of continued fever, the temperature never having exceeded $103\frac{1}{2}^{\circ}$ or 104° F. As the fever from the first was accompanied by a diarrhœa following rubeola, I was apprehensive of enteric fever of a mild nature, but as there were no characteristic symptoms of typhoid in either of these cases, they were treated in a similar manner to the first case. The diarrhœa, in each of the two cases referred to, was finally controlled by means of an emulsion of creasote and bismuth, with enough opium to accomplish the desired purpose. This last case was the mildest one I have seen this season, the patient being of a restless, uncontrollable disposition, was up half the time. The fever continued about three weeks.

In justice to Dr. Levi, I must admit that I have, this summer, seen a number of cases which began apparently as intermittents, but through neglect of proper treatment at the onset, the fever assumed a remittent character, which it was doubtless from the start, and might have been aborted by prompt treatment. In fact many of the cases of remittent fevers that I have seen this summer have commenced under the disguise of an intermittent, especially of the double tertian type, which, if neglected a few days, developed into true intermittent fever; whereas, the purely intermittent fever, though rarely seen, have not deviated from their

usual course, nor have the continued fevers, except as herein stated. I, therefore, regard the change of the apparent intermittent into the remittent type due to neglect or inefficient treatment, and not a result of the effects of antipyrin, for these cases have, so far as I have been able to observe, uniformly and speedily yielded to the usual specific treatment.

Finally, in justice to myself, if I have given expression to opinions differing somewhat from others, or apparently differing from some views I have heretofore expressed, in relation to the nature and treatment of the continued fevers of the South, I have done so consciously as the result of careful clinical observation, believing that it will be conceded by many, who have given much thought to this subject, that it is not so much a difference or change of opinion, but rather a change in the behavior of our fevers, due to some cause now imperfectly understood.

From the foregoing observations we may formulate the following conclusions:

1. The fevers of southern latitudes are, as a rule, similar in their symptoms, etiology and pathology, differing only in degree, which is probably due to difference of environment.

2. Intermittent fevers are seen less frequently than formerly. Remittent fever is now the prevailing type, and is often ushered in under the disguise of an intermittent.

3. True intermittent and remittent fevers are controlled now, as formerly, by the judicious use of quinine.

4. Continued malarial fevers cannot be arrested by any known specific treatment. Quinine, given as herein suggested, has had a salutary effect this season upon the course of our continued fevers.

5. Typical cases of typhoid, or true enteric fever, are rarely if ever seen here; but the atypical forms are met with occasionally in the rural districts, and more frequently in the towns and cities.

6. Malarial remittents have manifested a continued character when neglected or inefficiently treated at the outset, but have subsequently yielded to quinine.

7. Antipyrin has not apparently produced any changes in the different types of fever. The intermittent and remittent types,

when otherwise promptly treated, have been speedily and easily arrested, although the patients received antipyrin freely.

8. The continued fevers, under the occasional use of antipyrin, have uniformly declined between the eighteenth and twenty-first days—their continuity thereby in nowise being apparently increased.

A CASE OF INTUSSUSCEPTION.

BY W. E. MARTIN, M.D., SPRING HILL, TENN.

On or about May 1, 1891, Harrison Epps, colored, 60 years old, was attacked with something like bilious colic. The case was diagnosed and treated for same by Dr. J. W. Sharber, of this place. The patient suffered once or twice daily with paroxysms, which continued until August 15th. On this day I was called to see him. Found him suffering intense pain in the region of the liver and stomach. It is wonderful to say the pain continued periodically, and was confined to these parts. The day before seeing the patient he took 30 grains of calomel, through mistake, and this failed to produce a faecal discharge from the bowels. I was informed that he had been having mucous discharges previous to taking the calomel, and this continued, with the exception of a night in which he had several hemorrhages from the bowels. I was unable to ascertain how long it had been since he had had a faecal discharge, but from indications I judged it had been some days. The bowels were greatly distended and tympanitic, yet there was no tenderness or tumor that I discovered.

There was continual vomiting of contents of the stomach, and this was absolutely void of faecal matter. The tongue was heavily coated with a moist, white fur. The kidneys acted remarkably well all the time, and the urine was of normal color. There was no fever or acceleration of pulse. My diagnosis was obstruction of the bowels, but was not positive as to the exact form, yet I was inclined to think it was intussusception. Treatment, enemas of hot water and glycerine, and with hypodermic injections of morphia. Diet, liquid food with nutrient enemas.

The patient lived under this treatment for four weeks, but became very much emaciated.

On the 23rd of September he had a copious fæcal discharge from the bowels, after which all distention and tympanitis disappeared. Patient sank rapidly, but rallied somewhat with the use of stimulants. I then had a faint hope of his recovery; in this I was disappointed. In a few hours he grew worse, and died on the 26th of September.

Dr. Sharber and myself held autopsy on the 27th, and on examination found twelve inches of the ileum invaginated into the cæcum, in a gangrenous condition, with the most dependent portion of the gut or ileum torn. This shows plainly the cause of the action from the bowels which occurred three days before death. There were no spots, patches or bands of adhesion showing any inflammation of the coats of the intestines before death. There had been a very active inflammation of the peritoneum. There was only a slight trace remaining in the left iliac region, the balance having been taken up by absorption, or some other way.

SURGICAL CLINIC

OF

CHARLES S. BRIGGS, M. D.,

Professor of Operative Surgery and Surgical Anatomy in the Medical
Department of the University of Nashville and Vanderbilt University.

REPORTED BY

W. M. Brazelton, Medical Student.

APPENDICITIS—LAPAROTOMY—DEATH.

This patient, J. M., aged 27, a travelling salesman by occupation, entered the hospital this morning for treatment of a very serious abdominal disease. He has been for several days under the treatment of Dr. J. M. Rainey, at whose suggestion I was called to the case. The history, as given by his physician, is that four days ago he had been taken suddenly sick a short while after partaking of a very hearty meal, during which he had eaten a good many pecans. He was seized with severe paroxysmal pains in the abdomen, the severest pain being felt in the right iliac region. The attack was marked by some acceleration of the pulse, slight elevation of temperature, and occasional vomiting, but the most prominent symptom was sharp, agonizing pain. Purgatives were freely administered with unsatisfactory results. Large doses of morphia, hypodermically, were administered to control the pain. At first hot fomentations were resorted to, but affording no relief, a large fly blister was raised over the right iliac region. In this region a distinct swelling, painful and sharply defined, was detected, occupying a position midway between the anterior superior spinous process and the umbilicus. Over this swelling pressure with the fingers elicited most marked tenderness. The patient's condition rapidly grew worse. No evacuation of the

bowels could be obtained, though large enemata, thrown high up in the bowel were employed. Vomiting grew more frequent, the pulse-rate increased, the temperature ranged slightly above normal, and the iliac tenderness was more pronounced. I saw the patient first a few hours ago, and urged an operation as the only possible chance for the patient's life, and that a very slender one on account of the advanced stage of the disease.

You observe, gentlemen, that the patient presents the appearance of a very sick man. His features are drawn and anxious. His skin is pallid, and the surface of the body bedewed with a cold sweat. His pulse is 120, small and wiry, and his temperature is $102\frac{2}{3}^{\circ}$ F. The abdomen is greatly distended, tympanitic and exquisitely tender. An indistinct tumor, partially masked by the distension of the abdomen, can be detected in the right iliac region. The diagnosis is clear. The patient has acute appendicitis with, probably, perforation of the appendix vermiformis and suppurative peritonitis.

Appendicitis may be caused by impaction of foreign bodies taken with the food, by intestinal concretions, or small masses of hardened feces, but is occasionally produced by external causes, as violent blows upon the abdomen. Of the various inflammations of the parts in the right iliac fossa typhlitis or inflammation of the cæcum, perityphlitis when the tissues immediately around the cæcum are involved and appendicitis or inflammation of the appendix vermiformis, the latter is by far the most common, and it is most likely that typhlitis and perityphlitis have an origin in inflammation of the appendix, or at least are connected with disturbances of that rudimentary appendage. Appendicitis may terminate in resolution or in the formation of an abscess which carries with it the danger of rupturing into the peritoneal cavity thus giving rise to general peritonitis, or suppurative peritonitis may be immediately occasioned by perforation of the appendix and the escape of its contents into the peritoneal cavity.

In the case now before you peritonitis exists in consequence, most probably, of perforation of the inflamed appendix, and the danger to life is imminent. Certain death in a short time if left to itself—small chance of life even with an operation. Only one thing remains to be done—to open the abdomen, expose and remove the diseased appendix, and irrigate and drain thoroughly

the peritoneal cavity. Had the case been seen earlier and abdominal section done, the chances would have been far greater than now. Unfortunately, however, it is by no means easy to tell exactly when an operation is indicated. Very often the most extensive mischief is done before dangerous symptoms develop, after which there is little chance to do much. Besides, many cases which are at first very threatening, are relieved without the knife. Laparotomy will be performed in this case as a forlorn hope. The patient has been antiseptically prepared, and is now anesthetized. The abdomen is opened by an incision five inches in length in the right linea semilunaris extending to within two inches of Poupart's ligament. The hand is passed into the cavity to the cæcum and that organ and its appendix carefully examined. The appendix should be removed whether it is simply inflamed, perforated or gangrenous. A ligature is thrown around it close to the cæcum, and the appendix cut away. Should the wall of the cæcum be perforated the opening should be closed by Lembert's suture. Thorough irrigation of the peritoneal cavity with sterilized water should be carefully done until the water returns perfectly clear. A glass drainage tube should be placed in the pelvis and a large rubber tube carried into the bottom of the abscess cavity. The wound should be carefully closed by sutures of silk-worm gut, including the parietal peritoneum. This step is often accomplished with difficulty, owing to the rigidity of the abdominal muscles.

(The operation was performed as described. As soon as the cavity was opened a large quantity of putrid pus escaped, and the greatly distended bowels pushed out of the wound, making it difficult to expose the seat of the trouble. The cæcum and appendix were at length brought into view, the former almost denuded of its peritoneal covering, the latter presenting a large perforation near its attachment to the cæcum. A ligature was thrown around the appendix near the cæcum and the appendage removed. Thorough irrigation was used, the nozzle of the irrigator being passed in all parts of the cavity. Some difficulty was experienced in replacing the bowels, but this was at length effected after puncturing them in several places with a small needle, so as to permit the gas to escape. The glass drainage tube was carried to the cul-de-sac between the rectum and bladder, and the wound closed with silkworm

sutures. The patient reacted well, and his bowels moved spontaneously twice. Towards evening his pulse was 120, and temperature 102° F., but he rapidly grew worse, and, after suffering a great deal of pain, towards midnight became delirious and died at three o'clock—about ten hours after the operation.)

TRAUMATIC ANEURISM OF THE FEMORAL ARTERY IN HUNTER'S
CANAL FROM GUN-SHOT WOUND—LIGATION OF THE
ARTERY FOLLOWED BY MORTIFICATION—AM-
PUTATION OF THE THIGH.

The patient I now present to you is Dr. C. N., of Huntsville, Ala., a graduate of this college of the class of 1879. He has mortification of the left leg, resulting from the deligation of the femoral artery for traumatic aneurism supervening upon a bullet wound of the artery in Hunter's canal. The history of the case is as follows:

About six weeks ago, while employed as a prescriptionist in a drug-store, in Huntsville, Ala., he was called up late at night to wait upon a negro, who offered a 25-cent piece in payment for the medicine asked for. While making the change, the negro put a pistol to his head and demanded the contents of the money-drawer. Dr. N. threw up his hand and knocked up the pistol, which went off over his head. In the struggle for the pistol it was again discharged, the ball passing entirely through the patient's left thigh, entering the inner side at about the junction of the middle with the lower third, and passing downwards and outwards. The negro then made his escape; but as he ran the Doctor, who had by that time secured his pistol, fired twice at him without effect.

On consulting a physician it was found that a good deal of blood had been lost, but the hemorrhage had ceased spontaneously. Simple antiseptic treatment was applied, under which the wound healed rapidly without a drop of pus. The wound of entrance was on the inner aspect of the thigh, and was exactly in the line of the artery, when the extremity was placed in the surgical position. The patient got up in a few days and resumed his duties, and thought little of the wound until about three weeks after, when he became conscious of pain and stiffness in the wounded limb, and a pulsatile swelling made its appearance at the site of

the wound of entrance. Recognizing the fact that a traumatic aneurism had formed, he at once came to this city and consulted my colleague, Prof. T. L. Maddin, who referred him to me. A few words will explain the nature of the accident and condition of the parts when first seen. The bullet had evidently struck the artery and produced a contusion in the walls of the vessel, the result of which was the outer coat had given way and the tunica intima, with, probably, the tunica muscularis, had yielded and become distended into a pulsatile tumor. The external appearances were characteristic—a distinct swelling in the line of the artery, pulsating with the heart's systole, which pulsation was at once checked by pressure on the femoral below Poupart's ligament, at the same time that the swelling lessened in size. The aneurism in this case, though due to a traumatism, partook strongly of the nature of idiopathic aneurism, which is dependent upon a yielding in the coats of the artery consequent upon disease, while traumatic aneurism most usually is due to a penetrating wound of all the coats of an artery, the escape of blood into the tissues which are condensed by pressure and by inflammatory deposits into a sac, the cavity of which communicates with the lumen of the artery.

The treatment indicated, however, is that employed in the treatment of traumatic aneurism, that is ligation of the artery on both sides of the aneurismal sac. Accordingly, September 20th, the artery was exposed in Hunter's canal and ligated above and below the sac. It was noticed that the sac was quite elongated, and that the distal ligature was put upon the commencement of the popliteal artery. There were no points of special interest in the operation, other than the division of the internal saphenous nerve, which was so imbedded in inflammatory new formation lying directly over the artery that it was impossible to avoid it. One small vein, crossing the artery, necessitated the application of a ligature close to the femoral vein. The divided ends of the nerve were brought together and sutured by very fine silk threads passed through its sheath. After a careful antiseptic dressing, the limb was swathed in cotton, over which a very loose bandage was applied. The patient reacted well, and it was soon found that he had no sensation below the knee. The foot became cold and the skin unusually pallid. In three days the toes became dark and

discolored patches appeared on the sole of the foot and extended up the limb on either side to the knee. In the hope of limiting the extent of mortification, the foot and leg were kept continually immersed in carbolized water of a constant temperature of 90° F. On the 29th, 28th and 30th, the patient's condition became extremely alarming, temperature ranging between 102° and 104° F., pulse between 110 and 126, occasionally delirious. The line of demarcation promised to form just below the knee, and every effort was made to tide the patient over the critical period. From October 1st to 3rd the patient improved. The gangrenous process was now fully established. The limb was considerably swollen and discolored—large blebs formed over limited portions of the skin, marked fetor was present, and sensation was completely abolished. An imperfectly formed line of demarcation ran in an irregular line below the knee, but the mortification extended behind the leg into the popliteal space.

This is the history of the case, gentlemen, and the patient is now before you for amputation of the thigh. It is the rule, after deligation of the principle artery of a limb to amputate as soon as evidences of mortification are present, the line of section to be above the proximal ligature, but in this case the rule was disregarded in the vain hope that the collateral circulation might reestablish itself so far as to permit an amputation at the knee. The cause of the necrotic process was undoubtedly due to failure to establish collateral circulation after deligation of the main artery, for the mode of dying was plainly due to that cause, and not to venous obstruction. It will be remembered that the ligatures were so placed upon the artery as to include between them the anastomotica magna branch, which, as you know, is a most important agent in carrying on collateral circulation, and it may be that this fact is sufficient to account for the mortification.

The patient has been brought into the amphitheatre fully anesthetized, and the dressings having been removed, you can see the condition of the limb. The wound made in the deligation of the artery has healed throughout, and at each extremity may be seen the silk ligatures, which are still upon the artery. The leg and foot are considerably increased in size; the entire leg up to within three inches of the knee is of a dark, livid hue, several large blebs are present upon the sides of the leg, the fetor is marked,

little or no crepitus is present, but when examined by the touch the parts are doughy and inelastic. Observe just below the knee, running in an irregular line around the limb, the junction of the dead and the living is marked by a line of superficial ulceration, which, however, is not complete, the dark color of the leg extending behind into the popliteal sac as high as the distal ligature. The tissues immediately above the knee appear sound, and Prof. Maddin agrees with me that the limb may be removed by a section in the lower fourth of the thigh, the incision on the inner side being carried through the middle of the incision made in the deligation.

(The amputation was performed as indicated. The inner flap was made by incision from without inwards. As soon as the knife entered, it was manifest that the section had to be carried higher, for there was at once a gush of gas from the decomposed tissues and the finger carried into the wound found the tissues totally degenerated. Accordingly, the inner flap was cut by dissection, three inches higher up the thigh, making a short flap, while a longer external flap was made by transfixion. Section of the bone was made at the juncture of the upper and middle thirds of the thigh. Even at this point the muscular tissue was soft and friable. The hemorrhage was profuse from the numerous enlarged arteries and difficult to repress, owing to the softened tissues, which failed to hold the ligatures. Copious irrigation with mercuric bichloride solution was employed. The muscles were drawn together over the bone with a number of buried catgut sutures, large drainage tubes inserted, and the skin approximated with chromotized catgut sutures. The patient reacted slowly. The stump was dressed on the fourth day and the drainage tube removed. The wound looked very well; no redness, no pus. At the second dressing, before the class, it was found that two of the upper sutures had been absorbed, allowing slight separation of the edges of the wound. Patient continued to improve daily. At the third dressing, complete cicatization had taken place. The patient is sitting up, and will soon leave the hospital well.)

Selected Articles.

ON THE TREATMENT OF PNEUMONIA.

Read in the Section of Therapeutics at the Annual Meeting of the British Medical Association, held in Bournemouth, July, 1891.

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It seems presumptuous on my part to venture to discuss before a gathering like this the treatment of an affection so familiar as acute pneumonia, more especially as it is a question upon which there is comparatively little to be said that is either novel or open to debate. It is, however, mainly in the hope that my brief exposition of the subject may elicit the experience of others that I feel encouraged to deal with so trite a topic, and I trust that my lack of originality may be overlooked in pursuance of this laudable object.

In considering the treatment of any acute disease, and especially of a fever like pneumonia, it is impossible not to be struck with the change that has been wrought in our methods consequent on that which has taken place in our views of the essential nature of such affections. It would seem as if, with clearer insight on this point the more have our therapeutics become restricted, and the more humble we have become in our opinions as to the advantages of any particular treatment. This applies in special degree to the limitations imposed in respect to the drugs, since in addition to truer conceptions of morbid processes, we are met by the increasing knowledge of the action of medicinal agents. Hence

we are fast emerging from an empiricism which, guided in some degree by theoretical fancies, and to no small extent by traditional usage, paid little or no regard to the individual circumstances of the case, and less still to the pathological changes that accompany the process of a disease. The subject of the treatment of pneumonia from its historical side affords ample illustration of this. It has long stood as a test example of the powers of the healing art, and to this day we hear from time to time of the paramount virtue of certain remedies to influence its course. It was around this disease that the battle which ended in the greatest revolution in medicine that the world has seen chiefly raged; and which led also to the introduction of the theory that the type of disease was altered in apparent justification for the abolition of a heroic therapeutics. It is, however, far from my intention to revive the memory of the great blood-letting controversy, and I am willing to admit that the reaction against the practice went beyond the point of what may be considered justifiable. I will merely content myself with the remark, which will I presume be universally accepted, that the routine practice of repeated and copious venesections in the treatment of acute fevers and inflammatory diseases has no rational basis.

It is well to remember, before acknowledging the superiority of any particular line of treatment in acute diseases, that there are several grounds for fallacy in our conclusions thereupon, and it is largely owing to these being disregarded that so many different remedies have been vaunted as being most efficacious in controlling or arresting the natural progress of this affection. I may briefly refer to a few of these considerations which should always be borne in mind in dealing with pneumonia.

1. Although the pulmonary inflammation is the outward and visible sign of its morbid process, I would place as the most essential characteristic of pneumonia the state of fever which runs a fairly definite course, but it is very variable in intensity and duration, which mostly ends as it begins, and the issue of which is far more favourable in the young. It can hardly be otherwise than that any inferences derived from the observation of such a disease under particular lines of treatment may be very misleading. We know that under the most varied methods the crisis still occurs in a capricious and often unexpected manner, and

we have yet to meet with means whereby we can interfere to hasten its occurrence. No one can predict in any given case that this abrupt termination to the fever will occur as early as the third day or late as the tenth, or be still further delayed; whilst we are sometimes baffled by a recrudescence with signs of fresh involvement of lung, or by a prolongation of the febrile state from the implication of other parts or organs in the inflammatory process. Theoretically it might appear feasible that we should be able from our resources to influence the course of the disease—to prevent, for instance, the stage of pulmonary engorgement from passing into that of hepatisation—but for my own part I do not hesitate to say that no sufficient proof has yet been afforded of any such power to arrest or abort the pneumatic process; and that when such arrest seems to have followed our interference we are wrong in attributing it to the latter. As illustrations of methods which have for their avowed object the subduing of the intensity of the lung inflammation, mostly by their sedative and depressant action on the circulation, may be cited the use of such drugs as antimony, aconite, and veratria. These have been, and some are still being, strongly advocated; but it is surely not determined that any one of them has produced such an effect on the general course of the disease as to justify the routine employment of remedies that are powerful for evil as well as good. I have no right to criticise their employment, since I have never felt justified in prescribing them; at least in doses sufficient to produce any marked effect; but I may say that much good can be effected by treatment directed from another standpoint and, may I add, perhaps less harm. To afford satisfactory proof of such measures would require not only a large number of instances, but the inclusion of cases presenting every type of the affection, and without any age limitation. To do this thoroughly would entail on the part of the practitioner such a degree of confidence in the benefits as to amount to rashness, for the prescription of such depressants to the aged and enfeebled would be hazardous in the extreme, while to limit their administration to the young and robust would prove little beyond the natural powers of resistance to lowering measures.

2. Another fact in the history of acute pneumonia may be mentioned as likely to vitiate the statistical results of any line of

treatment, especially as regards mortality. This is the undoubted variability in the intensity of the disease at different periods. Here, too, pneumonia exhibits its kinship with other specific fevers, and it is particularly marked when it occurs in epidemic form. We have witnessed during the past few months in connection with influenza a more malignant type of the disease than is commonly met with; and I believe that if material existed for comparison between the relative mortality from pneumonia during this year's outbreak as compared with that of last year, it would be found that there was a great difference between them in this respect. Such variations can hardly be explained except on the hypothesis that at one time the pneumonia virus is more potent than at another, for it is not easy to discover any other factor which might be supposed to account for them. Moreover, it well known from hospital experience that the mortality from pneumonia varies from year to year, sometimes far exceeding, at other times falling far below the average. Many an erroneous conclusion as to treatment has been founded on the imperfect data derived from a too restricted period of observation.

3, This brings me to the third objection to the adoption of a narrow therapeusis in acute diseases, namely, the impossibility of continuing the experimental method for a sufficient length of time and under varied circumstances, so as to arrive at a reliable result. In pneumonia the tests of efficacy are mainly these two: Does the treatment materially shorten the duration of the disease, and does it diminish its mortality? Of these, the first is perhaps the most important to determine, since the second is governed by so vast a number of special factors beyond those inherent to the disease itself. It would, however, require a large accumulation of careful observations to determine the first point, and, judging from the records of the past, it may be doubted if it be possible to collect such a body of facts as will carry conviction.

4. Lastly, the greatest obstacle to the conduct of a therapeutical experiment on a large scale is the fact that it must necessarily entail a neglect of the individual case. This objection applies to all routine measures, and is one which cannot be disregarded. For, although we may lay down general principles to

guide us in the treatment of disease, we must always reserve to ourselves full liberty of action to vary its lines in presence of circumstances which depart from the ordinary conditions. Systems of treatment therefore become less and less binding, for it is not only the disease that has to be treated, it is the individual organism whose functions have become deranged by the action of what we term morbid agents.

I feel that in saying this much I have been only uttering truisms, which I might well have left aside were it not for an ingrained belief in the efficacy of certain methods which tend to become stereotyped amongst us. Nor in what I have now to say in support of a line of treatment which seems to deserve the name of rational do I wish to imply that there is no other line of practice open to us. I would only say that the pursuance of these principles seems to me to obviate the recourse to measures involving the administration of powerful drugs without commensurate advantages. It may be that there has been no very marked lowering of the general mortality, but at least it may I think be claimed for the "restorative" method introduced by Professor Hughes Bennett that it was more in accordance with our present knowledge of fever and that it affords a further proof that in the treatment of pneumonia we must have regard to the pyrexial state quite as much as to the lung inflammation. Indeed, in every case of acute pneumonia there are these two main indications to be met by treatment—the systemic effects of the virus and the local pulmonary lesion. The pneumonia is something more than inflammation of the lung and that the degree of constitutional disturbance present in any case is not proportionate to the extent of the local lesion are propositions in support of which many facts might be cited, but which are doubtless within the experience of all. The doctrine of "pneumonic fever" advanced, among the first, by the late Dr. Austin Flint necessarily requires the postulation of a specific virus with all that follows therefrom, and this doctrine has been materially strengthened by the researches of Friedländer, Fraenkel, Weichselbaum, and many others on the micro-organisms of pneumonia and the association of many other inflammatory affections with this of the lung. Both clinically and pathologically, then, it seems to be true that pneumonia is to be ranked among the

specific infective fevers, and, this being so, it remains to be seen how far its treatment must be modified by this view of its nature.

Now, failing the employment of any specific remedy which can neutralize or destroy the virus, our treatment of every acute febrile disease must be largely limited to the support of the natural vital resistance of the body to enable it to withstand the effects of the poison, and, in addition, to diminish so far as may be the lesions incidental to the pyrexial state itself. In pneumonia, as a rule, the pyrexia, although high, is mostly comparatively brief, so that it may be questioned whether the nervous symptoms and the more formidable cardiac asthenia which constitute the greatest dangers of the affection may not be partly, or perhaps mainly, due to the action of the virus. On the other hand, the remarkable change from a state of imminent danger to one of comparative safety that ensues on the crisis would point to the pyrexia itself being intimately associated with these grave symptoms, and justify us in treating the fever as such in the hope that some of these effects may be prevented. If the fever *per se* is not to be regarded as a source of danger, its occurrence affords at least an index of the continued operation of the virus, and the case is often most grave just before the febrile process comes to a stop; nay, even the perturbation of the crisis is itself sufficient to quench the last spark of vitality in the patient. Recognising this, it is plain that one main line of treatment must be that which affords nutriment in a form easily assimilable, and given with a sufficient frequency to maintain strength whilst the febrile process lasts; nor is there any need at the present day to dwell on this, which is the cardinal point in the treatment of all fevers, and has been so since the time of Graves; but linked with this comes the important question of the administration of alcohol. The value of alcohol in pneumonia, depends, I believe, as much on its utility as a temporary food as on its action as a cardiac stimulant, but its prescription must be guided by the same rule as govern its administration in all fevers, and have reference to the signs of exhaustion and cardiac failure that may be present. Remembering that we have to deal with a fever of limited duration, and knowing the importance of maintaining the strength beyond the crisis it may be sometimes necessary to give very considerable doses—as much, for instance, as 12 ounces

of brandy in the twenty-four hours—but one would reserve it until such indications arise, and not prescribe it as a routine, merely because the patient has pneumonia. There are many cases which neither require alcohol at any period nor are benefitted by it; but to discard it altogether on this ground would be as rational as to accuse it of causing the mortality from the disease, because the fatal cases are just those which have probably had the largest quantities of alcohol administered to them. I confess I do not know what we should do without this drug in some cases of pneumonia. The more diffusible stimulants, as ether and ammonia, are not equivalent to it, although they have their place as adjuvants in circumstances of marked cardiac failure. In such conditions, too, the prescription of digitalis, or of caffeine, may be of benefit, and cases are recorded where the timely hypodermic injection of such drugs has apparently maintained the heart's action over the critical period.

In addition to these restorative and stimulant measures, the object of which is self-evident, it becomes a question how far it is advisable to employ means to mitigate the intensity of the fever itself. For, although as I have just said, it is by no means certain that the cardiac enfeeblement is solely due to the febrile state, there can, I think, be little question that it is materially influenced thereby. In a long continued fever like typhoid, there is every reason to believe that the cardiac degeneration, of which there is clinical and pathological evidence, is directly related to the pyrexial condition. Still that the briefer fever of pneumonia is adequate to induce profound muscular changes is shown in the fact that one of the best marked instances of Zenker's degeneration of the recti abdominis muscles that I have seen occurred in a subject of pneumonia, who, in leaping out of bed in a fit of delirium, ruptured both the degenerated muscles. I am bound to state, however, that in many cases of fatal pneumonia the heart muscle has shown no manifest signs of degeneration. At any rate, it is plain that where the heart is already enfeebled, as in the alcoholic or aged, the subjection to a week's high fever is likely to still further impair its functional capacity.

It must, I think, be admitted that the antipyretic treatment which has proved of such signal service in typhoid fever is also of distinct advantage in pneumonia, quite apart from cases of

hyperpyrexia, about which there can be no doubt as to its merits.

The choice of means for carrying out this treatment is considerable. For my own part, I incline rather in favour of the application of cold as against the administration of drugs. The pneumonic patient should be very lightly covered, and the value of free exposure to the air was pointed out by the late Dr. Handfield Jones. He may be exposed to the air beneath a cradle covered by a sheet—a plan which will be likely to ensure a slight but appreciable reduction of the temperature of the body. Of all methods I have myself most experience of, that of cold compresses, which were recommended by the late Professor Niemeyer, at a time when the use of poultices was considered almost indispensable in every acute inflammation of the respiratory organs. Such compresses are mostly quite as well borne as poultices, and are by some considered to have a direct influence on the inflamed organ. This is, I think, an open question, and it may not be absolutely necessary to apply them to the affected side of the chest, since their main effect is no doubt that of mitigating the pyrexia. One rather grave objection to their use is the necessity for the frequent renewal, which disturbs the patient; and for this reason, if for no other, the plan introduced by Dr. David Lees of applying ice bags over the affected lung is to be preferred. Dr. Lees claims for the ice bag in some cases a very considerable control over the extension of the inflammatory process, but here again I would rather attribute the somewhat striking results that he records to the general antipyretic action of the application.

Amongst many other methods of applying cold the most efficacious is undoubtedly the immersion of the whole body for ten minutes in a bath at a temperature of 85° F. This may be safely carried out in pneumonia as in typhoid fever, but it is, except in cases where the range of temperature is hyperpyrexial, seldom necessary to have recourse to a measure, the practical difficulties of which are considerable; nor, so far as I can judge, is the effect of the bath so lasting in pneumonia as in typhoid. It may, however, be taken as certain that this subjection to the influence of cold does not in the least increase the inflammation, or expose the patient to the risks of bronchitis.

Medicinally, we possess in quinine, salicin, antipyrin, acetanilide, phenacetin, and similar drugs, agents whose antipyretic properties have led to their free prescription in fever. That they have remarkable power in reducing temperature is undoubted; but respecting their employment in acute pneumonia it is necessary to speak in guarded terms. Of all fevers, that of pneumonia would seem the most refractory to their action, and we may thus be led to administer very large amounts, which are not without risk to the cardiac power, before any appreciable effect can be observed. Quinine, which in small doses has but slight effect in this direction, is at the same time the safest to employ, and it alone may be necessary if the cold applications are well borne. As to the others, I will content myself with merely expressing my preference for the treatment by cold to that by antipyretic drugs.

In thus placing in the forefront the treatment of pneumonia as a fever I would not be thought to ignore the treatment of the lung condition, which may be so extensive as by itself to threaten life. I have already expressed my preference for cold compresses over poultices as the local application to the chest, and subsequently, when the physical signs indicate the persistence of pleurisy counter-irritation is of service. For the early stitch, which is probably pleuritic in origin, nothing is more serviceable than the application of three or four leeches, and I can hardly recall a case where they have failed to give relief. But as an alternative the local hypodermic injection of morphine may be employed. The cough of pneumonia in cases uncomplicated by bronchitis is seldom very troublesome, but if it is then it may be allayed by medicated inhalations—for example, of eucalyptus—rather than by opiates. When there is great involvement of lung, and the dyspnoea and cyanosis, together with the physical signs of such wide implication and of a laboring right heart, then venesection is distinctly indicated, and may be freely performed with much benefit. Indeed, it is only in such circumstances that venesection, once the routine measure for the treatment of pneumonia from the onset of its symptoms, can rationally be had recourse to. In such circumstances, also, the inhalation of oxygen has been successful in prolonging life until the resolution of the inflammation has set in. Mostly, I fear, the case in which one feels im-

pelled to resort to such a measure is in desperate straits, and little aid can be rendered by it. Expectorants are not needed unless the case be much complicated with bronchitis, when, too, one must abandon the cold compress in favor of the poultice.

To enter into full detail concerning the treatment of all eventualities, or even of the various types of the disease, would occupy too much of your time, with little profit. It would involve the consideration of many a disease in which pneumonia occurs as a complication, as well as of such of its direct sequelæ as empyema and pulmonary gangrene. I hope, however, that my reticence in this matter will not prevent our hearing the experiences of others on any point that may occur to them. Especially should I like to invite an expression of opinion upon the best measures to adopt in dealing with pneumonia complicated by delirium tremens, and as to the propriety of giving opiates in these circumstances. The gravity of the prognosis in cases having this conjunction makes it all the more incumbent on us to agree as to the safest mode of dealing with it. If there be no disease of the kidneys, nor any marked bronchitis, I should myself employ morphine in preference to chloral or the bromides, and perhaps hyoscyamine is to be preferred to morphine, if it were not that its effect in delirium tremens is sometimes disappointing.

In conclusion, I feel that I have but touched upon the fringe of a wide subject, in presenting in merest outline the principles which it seems to me should guide us in dealing with a disease like acute pneumonia. It may be said that after all this is nothing but "expectancy," and the criticism may be a just one. Still I would ask whether, in attempting anything more heroic or striking we do not deceive ourselves, and whether it is not true that in acute disease our *role* is really that of one who, aware of the possible eventualities and watchful of the indications of failing powers, strives to render assistance to the natural forces and to bring their efforts to a successful issue in the combat with morbid agencies. To claim more than this for our art is to magnify our office, and lay us open to receive unmerited credit or discredit according to the issue of the case. To claim less would be to abrogate our function entirely and leave all in the hands of Nature.

Dr. SANSOM concurred with the author in his view as to the comparatively inefficiency of drugs in the treatment of pneumonia.

On the other hand his experience of the treatment of pneumonia by means of cold applications was exceedingly encouraging. He insisted, calling attention to the analogy with the cold treatment of typhoid fever and the important statistical information recorded in regard to this disease, on the importance of early routine practice of cold, preferably ice applications, and hoped that members of the Section would carefully try the plan and record their results.

Dr. BARRS referred to the treatment of insomnia falling short of actual delirium, and expressed his preference for sulphonal in the management of this symptom. He also expressed his strong belief in the antipyretic treatment by means of exposure, sponging, icepacking, etc., in preference to drugs.

Dr. HUGH WOODS said, with regard to the drug treatment of pneumonia, he could not altogether agree with Dr. Coupland as the uselessness of drug, and especially as regards digitalis, which he had found of very great value in pneumonia if used early enough. This view was founded not so much on the results of a very long series of cases as on the observation of individual cases, in which he had found the blood disappearing very soon from the sputa under the influence of digitalis, and reappearing forthwith if the administration of the drug was prematurely desisted from.—*Brit. Med. Journal*.

Extracts from Home and Foreign Journals.

SURGERY.

THE DIAGNOSIS OF HEAD INJURY FROM DRUNKENNESS.

The subject brought forward by Mr. Battle in *The Lancet* of Sept. 12, 1891, is one of the first importance, especially to the surgeons of police who have to treat the patients. As surgeon to the C Division of the Metropolitan Police this subject in one form or another has been frequently brought to my attention, and some years since I wrote a brochure with the hope of assisting my brother surgeons in forming an opinion on, and in the treating, these cases he describes. Unfortunately, they are only a small portion of those which may be roughly classified as due to pressure on the brain. The diagnosis would be sufficiently difficult were these straightforward cases; but unfortunately, with few exceptions, they have a halo of alcohol surrounding them, masking or intensifying the symptoms upon which we rely to form our opinion. Of course, a police station or cell is not a proper place to make an elaborate diagnosis, and our instructions and desires are to have such cases removed to a hospital; but, unless the symptoms are pronounced, the hospital surgeons cannot take them in, and the surgeons at the workhouse infirmaries, if they have any doubt, will not do so. We have thus a responsibility thrown upon us most undesirable and perplexing. If we can remove the element of drink which, as I have said, hides the symptoms proper to brain trouble, we are more likely to be of service to the

patient and to relieve ourselves of this great responsibility. Feeling this want, as all must who are brought into contact with these cases, I have for some years employed ammonia as more generally applicable than any other means of treatment. The preparation I use is the liquor ammoniæ fortior, which I allow insensible patients guardedly to inhale until they are sensible to some extent of irritating action; when, the patients are able to swallow, three drops of the ammonia in a tablespoon of water are put far back in the mouth. The beneficial effects are soon seen; the fumes of drink vanish, and the symptoms proper to the particular brain mischief, if any, stand out more clearly. It is seldom necessary to continue the administration, though I have occasionally done so, and I have never seen any bad effects follow, as I at first thought possible.—*J. H. Waters in The Lancet.*

SURGICAL TREATMENT OF TYPHLITIS.

Dr. M. Kœrte, in an abstract in the Medical Age, says that surgical intervention is indicated in cases of perityphlitis. When we have an acute, diffuse peritonitis consecutive to a perforation. In cases of acute peritoneal abscess. When there is a retro-peritoneal abscess. In case of relapsing suppurative perityphlitis.

1. Mikulicz was the first to show that the intervention of the surgeon may sometimes save patients affected with the diffuse suppurative peritonitis consecutive to a perforation. I have three times operated on cases of this sort. One of the patients on whom I operated *in extremis* succumbed. The autopsy showed a cure might have been obtained if there had not been a third abscess which could not be evacuated, seated between the stomach and diaphragm; this was the direct cause of death. Of the two other patients, one recovered with only a superficial wound remaining; the second, a young man of eighteen years, is in the progress of recovery.

In operating, I advise not to make antiseptic lavage of the abdominal cavity; it is better to mop out the abscess with dry tampons. I do not take a great deal of pains to find the appendix vermiformis to excise it, for it will not do greatly to prolong the operation, the patient being always very much exhausted; but if the appendix can be readily found, it is well to cut it off, after having ligated it at the base with catgut.

2. Encapsulated abscesses should be incised as soon as possible, if we would not have life compromised by perforation; there is always danger of fatal pyæmia, as happened to three of my patients who did not have surgical treatment. It is the rise of temperature on which we depend for knowledge as to whether the peri-typhlitic effusion be prevalent or not. We can have recourse to exploratory puncture with a hypodermatic needle to ascertain if we have to do with pus. I have operated on five abscesses of this kind. Four of the patients rapidly got well; the fifth has still a stercoral fistula; perhaps we have to do in this case with a tuberculous disease. I do not in operating adopt the method of two stages advised by Sonnenburg.

3. The perforation of paratyphlo-enteric abscesses is a relatively rare event, but these abscesses often occasion a phlegmon; the pus penetrates to the sub-diaphragmatic space, and may pass from thence, by perforation of the diaphragm, into the pleural cavity.

I have operated on five cases of this sort; and all got well. Many authorities say we ought to make an early diagnosis of these abscesses; the exploratory puncture with the Pravaz syringe will much facilitate diagnosis.

4. The well-known symptoms of perityphlitic relapse are often explained by the retention of pus, and this of itself gives a reason why surgical intervention is desirable. I have operated twice in cases of this kind. In one of the patients, the appendix was twisted around the colon and adhered firmly to it; it was full of pus. I carefully detached the appendix, tied and cut it off, then sewed the stump to the wall of the colon. The sequelæ were very simple, and recovery rapidly ensued. In the second case, after making a herniotomy I found the appendix in the hernial sac, and excised it after ligation. Eight days afterward the patient was well. The appendix contained fœtid pus.

There is no doubt as to the necessity of operating in these cases. I do not advise following the practice of certain American physicians, who resort to the operation as a prophylactic during the first twenty-four hours after making the diagnosis of appendicitis; in fact, the great majority of cases of perityphlitis get well by internal treatment.—*Med. and Surg. Reporter.*

INTESTINAL OBSTRUCTION BY MASSES OF ROUND WORMS.

Dr. Heydenreich, of Nancy, reports (Sem. Méd.) a case of intestinal obstruction in which Nélaton's operation was performed in the left groin with successful results, and the artificial anus was afterwards completely and permanently closed by a novel autoplasmic operation. It was held that the obstruction in this case was directly due to the blocking of the intestine by a large accumulation of round worms. The case, however, up to the time of the operation, was diagnosed and treated as one of intussusception, and neither in this supposed instance of occlusion by round worms, nor in three other cases, which are all that the author could find in surgical literature, was the relation between the obstruction and the presence of round worms in the intestinal canal sufficiently close to permit one to reject positively the strong doubts that were expressed by Davaine on this point. The subject of the case reported in this paper was a child, aged eleven years, who came under the notice of the author on the ninth day of a severe attack of obstruction. The case having been diagnosed as one of intussusception, the idea of performing laparotomy was not entertained, as it was thought that the adhesions between the layers of intestine would be too firm to permit of the invaginated portion being drawn out. The small intestine was opened in the left groin on December 27th, and, two days later, a bulky mass, made up of seven round worms, presented itself at the artificial anus, and was extracted. The young patient quickly recovered from the attack of obstruction, and as has already been stated, the artificial anus was subsequently closed. In this, and also in one of the three collected cases, blood was passed from the anus during the period of obstruction.—*Brit. Med. Journal.*

AN UNUSUAL FORM OF CHANCER.

In the *Lancet* for September 19th, Dr. E. D. Mapother relates the case of a professional man from India, aged forty-nine and intemperate, who consulted him on January 13th for a chancre which had appeared a week before. About twenty-seven years before he had had chancroids and suppurating buboes, which healed very slowly. The sore was on the dorsum, a third of an inch behind the corona, and there were hard, enlarged glands in each groin. Small doses of blue pill, small inunctions in the

groin and dry lint were ordered. Good progress was made for a fortnight, but then the sore began to extend slowly, and there arose around it, except toward the corona, a thick ridge. This near the frenum was œdematous, but above there was a semi-solid deposit in the areolar tissue of the preputial folds. Many local applications were tried without effect, and iodoform seemed of but little service. On March 9th iodide of potassium was prescribed, together with the mercurial treatment. After ten days the skin over the hardest part of the ridge gave way, and matter similar to that in gunnata came out. Improvement followed, but so slowly that it was April 13th before cicatrization was complete. It ulcerated again superficially on the 20th, but finally healed in three weeks. The enlargement of the glands had become absorbed, and no secondaries appeared. The peculiar deposit and extreme slowness of healing, due probably to the age, habits, and former residence of the patient, seemed to render the case worth recording. A similar form was described by Fournier in the *Archives générales de médecine* for November, 1867.—*N. Y. Med. Jour.*

MEDICAL

BLOOD-LETTING IN URÆMIC CONVULSIONS.

Dr. Samuel Wilks, veteran physician at Guy's Hospital, is reminiscent, in a recent *Lancet*, of the good old days of blood-letting. He remembers seeing too many interesting persons snatched by this agency from the brink of the grave to be unmindful of its claims, and he attempts to find excuses for the present day and generation in its neglect of phlebotomy. Of his success with the lancet he writes the following:

“A young woman was brought into the hospital in a dying state, gasping for breath, and livid; there was a mitral bruit, engorgement of the lung with hæmoptysis, albuminous scanty urine, and dropsy. We bled her from the arm and the effect was immediate, the breathing became tranquil, lividity passed from the face, and improvement continued from that time. In cases of

uræmic convulsions the effects of bleeding are very striking; the right heart is relieved, and poisoned blood is removed from the system. One case of this kind, indelibly fixed in my memory, is that of a dressmaker, who, I believe, is still alive. I was asked a few years ago to see this patient, who had been in convulsions all night. I found a middle-aged woman in constant convulsive movements, froth issuing from her mouth, quite comatose, and almost pulseless. The whole body was livid and the extremities cold. The doctor said she was dying, and allowed me to bleed her. I took away a small wash hand basin of blood, and while yet flowing, the lividity passed off, the convulsions ceased, the body gradually became warmer. Her life was as clearly saved by the bleeding as if I had dragged her drowning out of the water, and this is more than I can say of drugs." With this are other instances of the same tenor.—*Jour. American Med. Association.*

SUBMEMBRANOUS LOCAL TREATMENT OF DIPHTHERIA.

At the last meeting of the American Medical Association, Dr. A. Seibert, of New York, reported thirty-five cases of pharyngeal diphtheria treated by submembranous injections, with a demonstration of the methods employed. He pointed out that the various antiseptics applied to the throat do not reach and destroy the bacilli underlying the false membrane. In order to effect this object, he injects by means of hypodermic needle-points an antiseptic into the inflamed mucous membrane under the affected part. He uses a hypodermic syringe, to which can be attached a long tube terminating in a flat, hollow extremity, from which projects a number of short hypodermic needles. A variety of shapes enables these needle points to be pressed into any part of the affected pharyngeal mucous membrane. After placing the syringe in position he presses the needles into the submucous tissue and then injects about twenty millimetres of chlorine water. This liquid he finds to be the most suitable, the safest, and the strongest antiseptic for this purpose. Of the cases reported he only lost two, and then from complications. The general treatment is at the same time carried out with careful attention to detail.—*Boston Medical and Surgical Journal.*

THE HYPODERMIC INJECTION OF CAMPHOR.

The employment of camphor hypodermically in solution in oil,

alcohol, or alcohol and ether, is much more general on the Continent than in England. German and Russian practitioners esteem it a valuable method of treating symptoms of impending collapse. Dr. Alexander, of Berlin, has published a paper giving the results of an extensive series of observations made during the last two years on the effects of hypodermic injections of oleum camphoratum (composed of one part of camphor to nine parts of olive-oil) in a large number of cases of disease of the lungs. The dose given was fifteen minims once a day. As the effects of camphor are cumulative, it was found that four daily injections were as much as could usually be borne without some unpleasant effect, such as headache and restlessness at night. After an interval of a week, however, one more injection could be given without causing any unpleasant symptoms. Phthisical patients seemed to bear continued treatment better than others, and its results in the last stage of phthisis were very valuable, the night sweats, the irritating cough, and the expectoration being diminished in a remarkable manner, even the first dose effecting a very noticeable improvement in the patients condition. In hæmoptysis the method also proved very useful, patients being enabled to get about again without fear of a recurrence more rapidly than under ordinary methods. Camphor injections administered in bronchitis increased the secretion at first, and afterwards caused it almost to disappear. They did not seem to be of much use when there was also emphysema. In pneumonia their value was especially marked in weakly individuals or in those with cardiac disease, and they cut short follicular tonsillitis and acute coryza. It was found that in some cardiac cases, where digitalis had ceased to be of benefit, after a few camphor injections, it could be again given with good results. These injections must, of course, be given to children only in very small quantities, but no effect appeared to be produced on the infants of mothers who were being treated by camphor injections for catarrhal pneumonia.—*Berliner Klinische Wochenschrift*.—*New York Medical Record*.

OBSTETRICS.

IPECACUANHA IN LABOR.

While the accelerating action of ergot in case of lingering labor is universally known and acknowledged, there is another drug which, so far as I am aware, is not noticed in works on midwifery, and which yet is capable in such cases of rendering signal service; I allude to ipecacuanha. Not only in cases of rigid cervix, where possibly it might be considered to act in a similar manner to antimony, but in cases of simple inertia in either first or second stage it is a potent instigator of uterine contraction.

In the course of general practice extending over many years I invariably carried a bottle of vinum ipecacuanhæ in my midwifery bag, and rarely, if ever, gave a dose of ergot in the first stage of labor. Time after time on coming to a confinement case where the pains have been feeble and inefficient, or had totally ceased, two or three 10 or 15-minim doses of the wine at intervals of ten minutes have been followed in a surprisingly short time by energetic uterine action, with a rapid termination to the labor. It never produces the quasitétanic contraction so often met with as the result of ergot, the pains continuing to recur regularly, just as they do in natural labor, but with greater force and at shorter intervals. Conviction of the value of the drug for this purpose induces me to give my experience of it, believing that its merits will be recognized by any who choose to give it a trial.—*Drapes in Brit. Med. Jour.*, Dec. 6, 1890.

CÆSAREAN SECTION FOR A GIANT INFANT.

Rachel and Neumer (*Répertoire d'Obstet. et de Gynéc.*, May 25, 1891) report the case of a woman, 40 years old, the abdomen of whom, in the twelfth pregnancy, was enormously distended. The labor not progressing, version was attempted, but the fetus would not pass the superior strait. Disarticulation of the leg, preparatory to evisceration, was attempted, but was unsuccessful. Finally, Cæsarean section was decided upon. The mother died soon

after the extraction of the fetus. The latter, almost exsanguinated as a result of the amputation, weighed $22\frac{1}{2}$ pounds. The parents were not unusually large. The only explanation of the great size of the fetus lay in the age of the mother and the number of pregnancies and in the fact that the fatal pregnancy had passed one month beyond term.—*Med. News.*

FLOODINGS IN EARLY PREGNANCY ; RUPTURE OF MEMBRANES AT SEVENTH MONTH ; DELIVERY AT FULL TIME.

Mrs. E., aged 26, multipara, was irregular in her periods from the end of July, 1889. In the first week of October of that year she had a very profuse period, which lasted for several days, and three weeks later she experienced an equally severe loss. On Dec. 15th, she had another flooding, and I was called to see her, and I believed from examination that she had had a miscarriage, but as what had been thrown away before my arrival I was unable to say definitely. On Dec. 25th another flooding occurred, and she was kept in bed for eight days under full doses of ergot. On April 29th, 1890, I was sent for, and found she was well advanced in pregnancy. She had been awakened from sleep by the sudden discharge of the liquor amnii, and thought labor was about to commence, hence her calling in assistance. To her surprise, and mine too, the waters kept draining away till June 24th, when she was delivered of a fine male child. Now, reckoning back 280 days from June 24th, the pregnancy commenced about Sept. 18th, and therefore these floodings occurred during the first fourteen weeks of pregnancy. I saw two of them, and they were not mere slight discharges, for the bed was saturated with the blood on each occasion.

My object in recording this case is to show that pregnancy may go on notwithstanding severe floodings in the early months and the premature discharge of the liquor amnii.—*J. C. Robertson, M.B., C.M., Edin., in Lancet.*

THE WHITE OF EGG IN THE TREATMENT OF SORE NIPPLES.

I wish to lay before the readers of the Medical Journal a remedy which in my hands has been most successful in that distressing complaint, the sore nipples of nursing women. It is the painting of the nipples several times a day with the white of

egg. This soothing albuminous covering forms a delicate film over the abraded nipple, and the surface is soon—within a few hours, except in severe cases—entirely healed.

I believe that there is no necessity for excoriations or cracks to occur on the nipples of nursing women if the first tender feeling is met promptly by this application. It is a remedy which can be had at a moment's notice in any household and easily applied with a camel's-hair brush or a feather.

CASE I.—Mrs. P. The nipples began to be painful on the fifth day. White of egg was ordered to be applied. After a few hours the pain had become much more bearable, and the next day it had entirely disappeared. There was no further trouble, except that applications had to be made now and then for a day or two as the pain reappeared. With the previous baby nursing had to be given up on account of cracked nipples.

CASE II.—Mrs. K. This patient I saw in consultation on the twelfth day. Both nipples were very painful. In the right nipple there was a very deep crack. Nursing caused the usual agony of such conditions. The baby occasionally vomited bloody milk. white of egg was ordered for both nipples. The right breast was not nursed by the baby for three days, distention being relieved by the breast pump, and also a belladonna plaster was applied intermittently to lessen secretion. At the end of three days the crack was quite healed and nursing was carried on for several months. Applications were made at times when the nipples became tender.

CASE III.—Mrs. V. On the third day the nipple of the right breast became slightly abraded, and pain was bitterly complained of. White of egg was ordered to the nipple. Next day the pain was bearable. The patient stated that during the night pain had appeared in the left nipple, and she began the application to that nipple also. A tendency to abrasion continued in both nipples for several weeks, but constant applications she was able to nurse her baby with little discomfort.

The albumin may best be applied just after nursing, while the nipple is still moist from the baby's mouth. As somewhat of a thick film is formed, it is well for the nipple to be moistened with a soft cloth dipped in water just before the baby is again put to the breast. The efficiency of the albumin is heightened by allowing it to dry on thoroughly before drawing the clothes again over the breast.—*Frank Van Allen, M.D., in N. Y. Med. Record.*

Editorials, Reviews, Etc.

PUBLISHER'S NOTICE.—The JOURNAL is published in monthly numbers of *Forty-eight pages*, at one dollar a year, to be always paid in advance.

All bills for advertisements to be paid quarterly, after the first insertion of the quarter.

Business communications, remittances by mail, either by money-order, draft, or registered letter, should be sent to the Editor, C. S. BRIGGS, M. D., Cor. Summer and Union Streets, Nashville, Tenn.

All communications for the JOURNAL, books for review, exchanges, etc., should be addressed to the Editor.

THE SOUTHERN SURGICAL AND GYNÆCOLOGICAL ASSOCIATION.

The fourth annual session of the Southern Surgical and Gynæcological Association will be held in the Hall of the House of Delegates in the city of Richmond, Va., on Tuesday, Wednesday and Thursday, Nov. 10, 11 and 12, 1891, under the presidency of Dr. L. S. McMurtry, of Louisville, Ky. The Secretary, Dr. W. E. B. Davis, of Birmingham, Ala., has arranged a full and interesting programme; and the Chairman of the Committee of Arrangements, Dr. Hunter McGuire, of Richmond, announces that the facilities for a successful meeting are complete. This Association is essentially a working organization, and is doing a great work in the Southern States. The three volumes of *Transactions* already issued are highly creditable to any society or country, and have elicited the highest commendation from the

press in this country and Europe. The meeting in Richmond promises to be the most successful the Association had held. Members of the profession generally are cordially invited to attend.

Following is the programme:

The President's Annual Address. Louis S. McMurtry, M.D., Louisville, Ky.

Remarks on Systematic Infection from Gonorrhœa, Illustrated by Cases. Bedford Brown, M.D., Alexandria, Va.

The Rational Treatment of Peritonitis, Based upon the Consideration of the Pathological Conditions Present. W. D. Haggard, Nashville, Tenn.

A Medico-Legal Aspect of Pelvic Inflammation. W. W. Potter, M.D., Buffalo, N. Y.

Complications in Pelvic Surgery, and How to Deal with Them. Joseph Price, M.D., Philadelphia, Pa.

Cholecystotomy—Report of Case—52 Gallstones and 10 Ounces of Pus Removed—Success. W. B. Rogers, M.D., Memphis, Tenn.

Some of the Complications of Psoas Abscess. J. McFadden Gaston, M.D., Atlanta, Ga.

Laparotomies Performed in the Past Year. Thos. Opie, M.D., Baltimore, Md.

Imperforation of the Rectum. Geo. Ben. Johnston, M. D., Richmond, Va.

A Case of Induced Abortion for the Relief of the Nausea and Vomiting of Pregnancy, with Remarks. Christopher Tompkins, M.D., Richmond, Va.

The Principle of Drainage as Applied to Surgery of the Deep Urethra. F. W. McRae, M.D., Atlanta, Ga.

The Neuroses of the Genito-Urinary System in the Male. G. F. Lydston, M.D., Chicago.

Nephrectomy, with Report of Cases. Edwin Ricketts, M.D., Cincinnati, O.

Venomous Serpents of the United States, and the Treatment of Wounds Inflicted by Them. Paul B. Barringer, M.D., University of Virginia.

A Report of Some Additional Cases of External Perineal Ure-

throtomy Without a Guide. J. Edwin Michael, M.D., Baltimore, Md.

Growth of Fibroid Tumors of the Uterus after Menopause. Jos. Taber Johnson, M.D., Washington, D. C.

The Part the Shoulders Play in the Production of Laceration of the Perineum, with Suggestions for its Prevention. W. D. Haggard, M.D., Nashville, Tenn.

The Pedicle in Hysterectomy; How Formed; Its Subsequent Behavior; Its Final Condition. I. S. Stone, M.D., Washington City, D. C.

A Case of Pelvic Abscess. John Brownrigg, M.D., Columbus, Miss.

A Case of Cyst of the Mesentery, with Remarks. J. A. Goggans, M.D., Alexandria City, Ala.

The Female Urethra. K. P. Moore, M.D., Macon, Ga.

Medico-Legal Aspect of Intestinal Surgery. J. D. S. Davis, M.D., Birmingham, Ala.

Albuminuria; Its Relation to Surgical Operations. J. W. Long, M.D., Randleman, N. C.

Senile Gangrene. Frank Prince, M.D., Bessemer, Ala.

Hemorrhage *versus* Shock. W. L. Robinson, M.D., Danville, Va.

Treatment of Gallstones, with Report of Cases. W. E. B. Davis, M.D., Birmingham, Ala.

(Title of paper not determined). Hunter McGuire, M.D., Richmond, Va.

(Title of paper not determined). Duncan Eve, M. D., Nashville, Tenn.

(Title of paper not determined). A. V. L. Brokaw, M. D., St. Louis, Mo.

(Title of paper not determined). Charles A. L. Reed, M.D., Cincinnati, O.

(Title of paper not determined). W. F. Westmoreland, M.D., Atlanta, Ga.

The Mississippi Valley Medical Association held its seventeenth annual session at St. Louis, Oct. 14, 15 and 16, 1891, President Dr. C. H. Hughes, of St. Louis, in the chair. The attendance

was large, the papers numerous and valuable. Dr. I. N. Love, the incomparable Chairman of the Committee of Arrangements, and his able assistants deserve unstinted praise for their provision of reception, rides, dinners, suppers, banquets, fine weather and full moon. Dr. C. A. L. Reed, of Cincinnati, was elected President; Dr. E. S. McKee, of Cincinnati, reelected Secretary; Dr. C. S. Bond, of Richmond, Ind., First Vice-President; Dr. J. H. Stucky, of Louisville, Ky., Second Vice-President; Dr. Joseph Ransohoff, of Cincinnati, Chairman Committee of Arrangements. Place of meeting, Cincinnati, Oct. 1892.

At a meeting of the Medical Department of the University of Nashville and Vanderbilt University, held Oct. 24, 1891, the following minute was unanimously adopted:

This Faculty has heard with deep regret of the death, after a brief illness, of William B. Reese, Esq., a Trustee of the University of Nashville, and a Professor in the Law Department of Vanderbilt University, and records its sense of the loss those institutions have sustained, and of the loss to this community in the death of an accomplished gentleman and a public-spirited citizen, and tenders its condolence with his bereaved family.

At a meeting of the graduating class of the Medical Department of the University of Nashville and Vanderbilt University, Oct. 17th, an election of class officers took place, and the following were elected: President, C. C. Sullivan, of Waverly, Tenn.; Vice-President, H. L. Appleton, Centre, Ala.; Secretary, J. G. Bas-kin, Anthony, Fla.; Treasurer, W. A. Lackey, Hopkinsville, Kentucky.

As we approach the end of the year, when Volume LXX. is completed and Volume LXXI. will commence, we are anxious to know who of our subscribers wish their subscriptions continued

for another year. The JOURNAL, in appearance at least, has been greatly improved, and cost a good deal of money, though we are conscious of no regret that we have put forth a more expensive periodical, for we feel that our subscribers have been pleased with the improvements.

But we must have money to continue. The subscription rate is small, and it therefore requires close collection to make ends meet. We beg every one at present in arrears to send in the amount he owes at once, with notification as to whether he wishes the subscription continued. Do not put it off for a more convenient time, but attend to it at once. Statements are enclosed in this issue to every one who is indebted to the JOURNAL, and we earnestly hope we will hear at once from each and every one who is in arrears.

BOOK NOTICES.

A TEXT-BOOK OF PHYSIOLOGY. By M. FOSTER, M.A., M.D., LL.D., F.R.S., Professor of Physiology in the University of Cambridge, and Fellow of Trinity College, Cambridge. Fourth American, from the Fifth English Edition, thoroughly revised, with notes, additions, and two hundred and eighty-two illustrations. Philadelphia: Lea Brothers & Co. 1891.

This classical work is well-known to the profession. This, the fourth American edition, comes to us enlarged and thoroughly revised. It may be said that text-books upon physiology should be more interesting to the student as such than those upon any other subject. Certainly too much importance cannot be attached to the effort to render such treatises clear and intelligible, for thorough acquaintance with physiology is necessary to a correct appreciation of pathological processes, and hence to the scientific practice of medicine. This work is eminently calculated to meet the wants of the student. The author has succeeded in making a book which presents unusual charms for a text-book. It is writ-

ten in a clear, forcible, easily intelligible style that is sure to render it always a favorite with the student. The additions and improvements of this edition puts it in the front rank with similar works, and in recommending it to students as the best text-book recently published on the subject we feel that we do no more than the work deserves.

A MANUAL OF HYPODERMATIC MEDICATION: The Treatment of Diseases by the Hypodermatic or Subcutaneous Method. By ROBERTS BARTHOLOW, A.M., M.D., LL.D., Emeritus Professor of Materia Medica, General Therapeutics, and Hygiene in the Jefferson Medical College of Philadelphia; Honorary Fellow of the Royal Medical Society of Edinburgh, Honorary Member of the *Societe Medico-Pratique de Paris*; Fellow of the College of Physicians of Philadelphia; Member of the American Philosophical Society; Fellow of the Medico-Chirurgical Faculty of Maryland; Honorary Member of various State and local Societies; Author of a Treatise on the Practice of Medicine; of a Treatise on Materia Medica and Therapeutics; of a Manual of Medical Electricity, etc. Fifth Edition. Revised and enlarged. Philadelphia: J. B. Lippincott Company. London: 10 Henrietta Street, Covent Garden. 1891.

If one may estimate the growing importance of a system of treatment by the size of works treating of the methods of using such a system, hypodermic medication is rapidly growing in favor. The appearance of the first edition of this work a number years ago will be remembered by many as quite a modest looking little volume of maybe one hundred and fifty pages. This the fifth edition, with the pages of the book considerably increased in size contains 540 pages. The fact that in many instances pathogenic organisms can be reached and treated by this method better than in any other way accounts in a measure for the more frequent resort to hypodermatic medication. The work is certainly the most complete on the subject published. That the work is thorough, intelligible and attractive is vouched for by the reputation of the distinguished author. No physician can afford to be without it.

MEDICAL COMMUNICATIONS OF THE MASSACHUSETTS MEDICAL SOCIETY. Vol. xv., No. ii. Boston: Printed by David Clapp & Son, 115 High Street. 1891.

We are always glad to receive this excellent volume, for it invariably contains a great deal that interests and instructs.

Every communication which appears in the collection is scientifically important, but our attention was particularly struck with the excellence of the paper on the "Diagnosis and Treatment of Appendicitis."

PULMONARY CONSUMPTION A NERVOUS DISEASE. Considered as such from a practical, a clinical, and a therapeutic stand-point. By THOMAS J. MAYS, M. D., Professor of Diseases of the Chest in the Philadelphia Polyclinic and College for Graduates in Medicine; Visiting Physician to the Rush Hospital for Consumption of Philadelphia; Fellow of the College of Physicians of Philadelphia; Member of the Philadelphia County Medical Society; Member of the Neurological Society of Philadelphia, etc., etc. 1891. George S. Davis, Detroit, Mich.

This brochure contains a great deal that should prove of the greatest interest to the physician. It treats of pulmonary consumption based upon the theory of a neurotic origin. The author opposes the germ theory of the disease, arguing against it principally on the utter failure of anti-germ agents in combatting the ravages of the disease. Perusal of the brochure will fully repay the reader, for it contains much that is new and readable.

TRANSACTIONS of the Fifty-eighth Annual Session of the Medical Society of the State of Tennessee. Nashville, 1891.

The Transactions of the Fifty-Eighth Annual Session of the Tennessee State Medical Society, a well-arranged and well-printed volume of 278 pages has been received. Every member of the Society should be proud of such a creditable volume of Transactions. The publisher's work has been well done, and the duties of the Committee of Publication, chief of which is the efficient Secretary, Dr. D. E. Nelson, have been excellently performed. The collection of papers in this volume is unusually attractive.

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Original Communications.

CANNABIS INDICA AS AN ANODYNE AND HYPNOTIC.

BY J. B. MATTISON, M.D.,

Medical Director Brooklyn Home for Habitues, Member American Medical Association, American Association for the Cure of Inebriety,
New York Academy of Medicine, New York Medico-
Legal Society, New York Neurological Society,
Medical Society of the County of Kings.

Indian hemp is not a poison. This statement is made, just here, because the writer thinks a fear of its toxic power is one reason why this drug is not more largely used. This mistaken idea lessens its value, because it is not pushed to the point of securing a full therapeutic effect. This is a fact. One of the best pharmacologists in this country not long since expressed a very touching solicitude lest the writer's advocating robust doses of this

valued drug might cause a decrease in the census that would seriously imperil his professional good repute.

There is not on record any well-attested case of death from *cannabis indica*. Potter says: "Death has never been produced." Hare asserts: "No case of death from its use in man is on record." Bartholow affirms: "Cases of acute poisoning has never been reported." Stille states: "We are not acquainted with any instance of death." Wood declares: "Hemp is not a dangerous drug; even the largest doses do not compromise life. No acute fatal poisoning has been reported." A prolonged personal experience, compassing the history of many cases—men and women—and hundreds of doses, ranging from 30 to 60 minims of the fluid extract, has never brought any anxiety along toxic lines.

Having thus brushed aside this bugbear we may note, *en passant*, the statement, on high authority—Potter—that "*cannabis* was formerly much employed as an anodyne and hypnotic. It is now somewhat out of fashion." Why this early repute has not been continued, is due to a cause cited, coupled with non-reliable products, and, doubtless the coming of other analgesic-soporifics. The first cause need not longer obtain; the second can be removed by careful choosing and trial; while the last should not prelude the use of a drug that has a special value in some morbid conditions, and the intrinsic merit and superior safety of which entitle it to the place it once held in therapeutics. Digitalis, for a time, was in disuse. So, too, codeine, which my experience has proved a valuable anodyne—one worthy a wider use than it has had, and which I think it will surely get—and impelled me to present the American Medical Association, at its last meeting, with a paper thereon, I trust that you have done me the honor to read.

There is a consensus of opinion among writers on therapeutics as to the anti-agrypnic, analgesic and anæsthetic power of Indian hemp. For the latter it was used prior to ether. Wood, testing it in himself, asserted "marked anæsthesia of the skin all day." Stille says: "Its anæsthetic virtue is shown in allaying the intense itching of eczema, so as to permit sleep." And that a similar seemingly trivial disorder may have a serious outcome is proven by the fact that a well-marked case of triple addiction,

under my cure last year—a medical man who took daily 15 grains morphine with 15 grains cocaine, subcutaneously, and 14 ounces of rum—had its rise in a morphia hypodermic taken to relieve urticaria.

Stilé says: "Its curative powers are unquestionable in spasmodic and painful affections." Noting the latter in detail, its most important use is in that opprobrium of the healing art—migraine. In a paper by the writer, eight years ago, "Opium Addiction among Medical Men,"—*Medical Record*, June 9, 1883—in reviewing the causes, this was asserted the most frequent. Enlarged experience has not changed that opinion. A case from such cause, woman, ten years morphia taking, 30 grains, by mouth, daily, is now under my care. A sister, so situated, from the same causes awaits similar service; and their mother took morphia for headache till death ended her need.

Ringer says: "No single drug have I found so useful in migraine." He thinks it acts well in all forms, but seems most useful in preventing rather than arresting. He deems it specially effective in attacks due to fatigue, anxiety, or climacteric change. Dr. E. C. Seguin, in 1877, commended it highly.

Dr. Wharton Sinker, in a paper on migraine, gives first place to cannabis, and thinks it of more value in this form of headache than any other. Richard Green, who first commended it in this complaint, thinks it not only relieves, but cures; in nearly all cases giving lasting relief.

In the *British Medical Journal*, July 4, 1891, Dr. Suckling, Prof. of Medicine, Queen's College, Birmingham, writes: "I have during the last few years been accustomed to prescribe Indian hemp in many conditions, and this drug seems to me to deserve a better repute than it has obtained." He calls it almost a "specific" in a form of insanity peculiar to women, caused by mental worry or moral shock, in which it clearly acts as a psychic anodyne—"seems to remove the mental distress and unrest." After commending it in melancholia and mania, he says; "In migraine the drug is of great value; a pill containing one-half grain of the extract, with or without a one-quarter grain of the phosphate of zinc, will often immediately check an attack, and if the pill be given twice a day continuously, the severity and frequency of the attacks are often much diminished. I have met

with patients who have been incapacitated for work from the frequency of the attacks, and who have been enabled by the use of Indian hemp to resume their employment." In a personal note from the doctor he wrote: "I have used Indian hemp as an anodyne and hypnotic, and find it most useful in both ways. I have never seen any ill results."

Anstie commends it in migraine and the pains of chronic chloral and alcohol taking. In his work on neuralgia—the best ever written, and one which I advise every one to read, if not read—he says: "From one-quarter to one-half grain of good extract of cannabis, repeated in two hours, if it has not produced sleep, is an excellent remedy in migraine of the young. It is very important in this disease that the habit of long neuralgic paroxysms should not be set up."

Russell Reynolds thinks that in neuralgia, migraine and neuritis, even of long standing, it is by far the best of drugs. Mackenzie has used it with much success in constant all-day headache, not dependent on anæmia or peripheral irritation. Bastian and Reynolds commend it in the delirium of cerebral softening, and the latter says it calms the head pain and unrest of epileptics. In cardiac tumult, in senile insomnia and delirium, and the night unrest of general paresis it acts well.

In some diseases common to women hemp works well. Grailly Hewitt says that in many cases of uterine cancer it allays or prevents pain. Ringer asserts it sometimes signally useful in dysmenorrhœa. West commends it here. Potter states that its anodyne power is marked in chronic metritis and dysmenorrhœa; and Hare thinks it of great value in chronic uterine irritation and nervous and spasmodic dysmenorrhœa. Donavan and Fuller claim it of value in migraine and chronic rheumatism; and Mackenzie in hay fever and hay asthma.

In genito-urinary disorder it often acts kindly—the renal pain of Bright's disease; in vesical spasm; retention of urine, and chordee; and it calms the pain of clap equal to sandal or copaiva, and is less unpleasant. The distress of gastric ulcer and gastrodynia are eased by it, and in other and varied neuralgias it serves one well. In some cases of advanced phthisis and other cureless diseases it will bring euthanasia by allaying pain and unrest

My experience with hemp covers more than a decade, many

cases, and several pounds of fluid extract. It is proper to state that these cases have been solely habitués or ex-habitués of opium, chloral or cocaine. In these, often, it has proved an efficient substitute for the poppy. Its power in this regard has sometimes surprised me. Both sexes took it, and with some no other drug anodyne was used. One of these—a naval surgeon, nine years a 10 grains daily subcutaneous morphine taker—recovered with less than a dozen doses. My oldest female patient—64—found its service complete. Its action has varied, as some cases respond more fully. This during the early abstinence time. Later, it has done good in the post-poppy neuralgiæ, especially the cranial kind, and it has calmed mental pain and unrest.

As a hypnotic, Frommuller gave hemp in 1,000 cases. Success, 530; partial success, 215; no success, 253. As such in delirium tremens, Potter declares it "the best." Anstie thought it better than opium when the pulse is feeble. Phillips asserts it "one of the most useful." Tyrrell and Beddoe say the same. Suckling's opinion has been given. McConnell commends it in the insomnia of chronic cardiac and renal disease. Oxley lauds it in the insomnia of severe chorea, especially in children; the tincture "more effectual than any other hypnotic."

My own results prove it a satisfactory soporific, even oftener than as an anodyne. And this, too, under conditions that test thoroughly the power of any drug in this regard, for the insomnia of ex-poppy habitués finds its equal only in the agrypnia of the insane. With many, no other hypnotic was used. The sleep has been sound and refreshing. Many cases showed a notable influence to it as regards time—somewhat akin to sulfonal. Two hours sufficed. The first, pleasant stimulation; the second, increasing drowsiness, ending in sleep.

Again, I admit my special cases may involve a condition making them more easily subject to hemp hypnosis, but these do not preclude the wisdom of its trial with other patients in whom it may act equally well.

Writers on cannabis refer to certain peculiar effects—which, in our thinking, are more often peculiar to the patient—that may here be noted. One is a mild intoxication. I say "mild" because the hashish, assassin-like, running-a-muck form is less fact than fancy. It is said temperament largely determines the mental ef-

fect whether it be grave or gay, merry or mad. Most of my cases—when such—have been in a merry mood. Of the hundreds of times given, only once did it excite to violence. That was a young physician, six years ago, in which it came close to a personal assault on the writer that was warded off only by superior strength. The patient afterward avowed no knowledge of such a situation, was profuse in apology, and stated that once, after taking hemp simply to note results, he routed every one out of the house, including his own grandmother!

Catalepsy is a rare sequence. We have seen it once. A woman, 23, brunette, small but active, took, in early evening, 40 minims Squibb's fluid extract as a soporific. After playing cards half an hour, she began to be very jo'ly, and it was suggested she retire. Visiting her later, she was found completely cataleptic. It soon subsided, sleep followed, and no after ill-effect.

Failure with hemp is largely due to inferior preparations, and this has had much to do with its limited use. It should never be called inert till full trial with an active product proves it.

Wood thinks the English extracts best. I have used, mainly, Squibb's fluid extract. To a small extent, Parke, Davis & Co.'s Normal Liquid. They are reliable. Hare commends the solid extract made by the latter, and by McKesson & Robbins.

Merck has produced two elegant and efficient extracts—cannabine tannate and cannabinone. They are essentially hypnotic. I show you specimens. The former has been found by Prior, Vogelsgesang, Mendel and others, a satisfactory soporific. Prior gave it 100 times to 35 persons—the most with success. In hysteric cases not calmed by chloral or opium, it acts specially well. In the small dose of one grain it has brought sleep when one-third grain morphia failed.

Another cause of failure is too timid giving. I am convinced that the dose of books is, often, too small. The only true way is, once a good extract, push it to full effect. My doses have been large—40 to 60—minims of the fluid extract—overlarge for the non-narcotic habituë; but, as we years ago asserted, habitual poppy taking begets a peculiar tolerance of other nervines, and they must be more robustly given. Both sexes have taken them—women frequently—with no other effect than quiet and sleep. I think, for many, small doses are stimulant and exciting; large

ones, sedative and quieting. They are the outcome of an experience with smaller doses that failed of effect desired. They prove hemp harmless, and they add proof to the opinion of most neurologists that, once a nervine is needed, it is often better to give one full dose than several small ones.

The tincture—3 grains to the drachm—may be given in doses of 20 to 60 minims. The fluid extract, 5 to 20 minims. The solid extract, $\frac{1}{2}$ to 2 grains. Tannite of cannabin, 5 to 15 grains. Cannabinone, $\frac{1}{2}$ to $1\frac{1}{2}$ grains. Cannabinone with milk sugar, 5 to 15 grains, and each repeated or increased till full effect is secured. It is said that in women cannabinone acts twice as strongly as in men. In headache, periodical or long continued, $\frac{1}{2}$ to 2 grains solid extract may be given each hour or two till the attack is arrested, and then continued in a similar dose, morning and night, for weeks or months. It is important not to quit the drug during a respite from pain.

I close this paper by again asking attention to the need of giving hemp in migraine. Were its use limited to this alone, its worth direct and indirect, would be greater than most imagine. Bear in mind the bane of American women is headache. Recollect that hemp eases pain without disturbing stomach and secretions so often as opium, and that competent men think it not only calmative, but curative. Above all, remember the close genetic relation of migraine relieved by opium, to a disease that spares neither sex, state nor condition.

Dr. Suckling wrote me: "The young men rarely prescribe it." To them I specially commend it. With a wish for speedy effect, it is so easy to use that modern mischief-maker, hypodermic morphia, that they are prone to forget remote results of incautious opiate giving.

Would that the wisdom which has come to their professional fathers through, it may be, a hapless experience, might serve them to steer clear of narcotic shoals on which many a patient has gone awreck.

Indian hemp is not here lauded as a specific. It will, at times fail. So do other drugs. But the many cases in which it acts well, entitle it to a large and lasting confidence.

My experience warrants this statement: *cannabis indica* is, often a safe and successful anodyne and hypnotic,

AMPUTATION ABOVE THE WRIST-JOINT.

BY T. A. CASEY, M.D., OF GALLITON, ALA.

Thomas S., age seven years, had his hand crushed in a syrup-mill, on September 30th. I was called, and in consultation with two other physicians, we decided that an amputation just above the wrist-joint was indicated.

The operation was performed the same day of the accident, in the following manner:

The arm for about six inches above the line of incision was shaved, after which it was thoroughly washed in a bichloride solution. When the patient was partially anæsthetized with ether, a stout bandage was tightly applied from the wrist to about the middle of the humerus; a tourniquet was then placed around the arm and the bandage removed. Two large flaps, which had been torn up by the cast-iron rollers of the mill, were then turned back, one on the dorsum and one on the palmar surface of the hand. The flaps were composed of integument, superficial and deep fascia. The hand was washed in a sublimate solution, and a more thoroughly examination was made as to the extent of the injury. This only confirmed our first decision.

A circular incision was made just above the wrist-joint, including the integument and subcutaneous tissue. This was then carefully dissected back until there was complete covering for the stump. All the muscles of the forearm, including the vessels and nerves were then cut squarely down to the bones. A three-tailed bandage was then applied in order to protect the soft tissues from the saw, and the radius and ulna were sawed through. The radial, ulnar and anterior and posterior interosseous arteries were secured and ligated with animal ligatures without much difficulty. This completely stopped the hemorrhage, except a little oozing.

The external wound was closed with silk sutures, the stump being thoroughly washed beforehand in a carbolized and sublimated solution. Dressing was applied, and was allowed to remain till the eighth day, at which time it was removed, and the stump was almost completely healed up. There was not enough of hemorrhage to stain the bandage on the outside, and there was not a drop of pus about the wound at any time.

Below will be found range of temperature and also the pulse rate:

Second day. Temperature, $99\frac{1}{2}^{\circ}$ F.; pulse, 100.

Third day. Temperature, 100° F.; pulse, 112.

Fourth day. Temperature, $99\frac{2}{5}^{\circ}$ F.; pulse, 104.

Fifth day. (Did not see the patient.)

Sixth day. Temperature, $99\frac{1}{5}^{\circ}$ F.; pulse, 84.

Seventh day. (Did not see the patient.)

Eighth day. Temperature, normal; pulse, 95.

On the eighth day the patient had been up, and the pulse was somewhat excited when I saw him.

This case is interesting to me because I only graduated last March, in the Medical Department of Vanderbilt, and this is my first case of amputation.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

THE ETIOLOGY AND TREATMENT OF GRANULAR CONJUNCTIVITIS

Was the title of a paper by Dr. Francis Dowling, of Cincinnati, before the Mississippi Valley Medical Association at its recent meeting at St. Louis. He said this disease was not confined to any country or locality, but may be found in all quarters of the globe, though its great hot beds are in some of the countries of the Orient. Certain races are especially liable, as the Irish and Jews. Negroes almost exempt. It is more frequent between the ages of 15 and 45 years. The atmospheric condition exerts an influence, low regions and swamps favor its spread. The disease is highly contagious. It is safe to say that three-fourths of the blindness throughout the world is caused directly or indirectly by it. In 1886 in Finland the proportion of the blind was as 1.348 of the population, and the principal cause was granulated lids. Eight per cent. of the blind in the State of New York owe their condition to this disease. There is usually some special liability of the individual to its contraction as a scrofulous or lymphatic constitution. A simple conjunctivitis under favorable conditions of bad air, damp climate, overcrowding in schools, barracks, etc., developed in a lymphatic or scrofulous subject, will in the course of time develop into genuine granular conjunctivitis.

The treatment usually recommended for this disease is touching the averted lids with astringent or caustic applications in either the solid form or solution of various strengths. The most popular of these is the cupri sulph. or blue stone. The mitigated nit. argenti is next, but should be washed off when used in solid form, as by continued use it is apt to leave scars. Dr. Abadie, of Paris, has recently reported the results of a series of experiments in the treatment of granular conjunctivitis by means of a

solution of 1.500 solution of bichloride of mercury. The patient is anæsthetised, then the lid is completely everted, the granulated membrane thoroughly scarified with a small bistoury and the solution well rubbed in with a small brush. The rubbing is kept up until the bleeding is stopped in a measure and the mucous surface resembles parchment in color. The lid is afterward touched up once a day with the solution until the granulations are eradicated. This the author says often occurs in three or four weeks even in old cases, which often took many years to accomplish under the old treatment. Should this mode of treatment possess the merits the doctor claims for it, it will prove a veritable boon to humanity.

In outbreaks of the disease in schools, barracks, etc., the afflicted should be completely isolated, their apartments kept absolutely clean and thoroughly fumigated with burning sulphur, or other means at least once a week. Errors of refraction should always be corrected in granular conjunctivitis as if these be allowed to remain no treatment will avail for the disease. Constitutional medication in the shape of tonics and alteratives is usually required combined with the local treatment.

THE INFLUENCE OF GRAVE YARDS ON PUBLIC HEALTH, OR THE SANITARY DISPOSAL OF THE DEAD

Was the subject of an interesting paper before the Association by Dr. J. W. Carhart of Lampasas, Texas.

He gave a resume of the manner of disposing of the dead through the past centuries and among various nations of ancient and modern times, and as this question thrusts itself upon the attention with accumulated force each year, wise and proper settlement is demanded. Aside from æsthetic considerations and natural love and veneration for departed friends, the inevitable conclusion must be reached from all the facts at command, that the grave yard should become a thing of the past and that incineration is the method most in accordance with science, sanitation, æsthetics, reason and religion.

TEMPERATURE NO GUIDE IN PERITONITIS

Was the subject of a paper by Dr. H. C. Dalton, superintendent of the St. Louis City Hospital. The doctor has become so

sceptical on the subject of fever in peritonitis that he is no longer guided by the thermometer in considering the advisability of an operation in abdominal cases. He takes the temperature in all cases and weighs it for all it is worth, but does not let the lack of fever deter him from operating when other symptoms on which he has learned to place far more reliance, would move him in the opposite direction. A number of cases were reported, going to prove the presence of peritonitis in the absence of fever. He concludes that when fever is present in belly cases it is well to remember that it indicates peritonitis, its absence, however, does not warrant us in saying that peritonitis is not present, and should bind us to the actual condition.

AN INTERESTING CASE OF PACHYMEINGITIS INTERNA, WITH REPORT AND PRESENTATION OF SPECIMEN

Was the subject of a paper by Dr. F. C. Hoyt, of St. Joseph, Mo.

GASTROSTOMY FOR IMPERMEABLE STRICTURE OF THE CARDIAC END OF THE OESOPHAGUS

Was the subject of a paper by Dr. Arch Dixon, of Henderson, Ky. The patient who recovered was presented to the Association. Subsequent dilatation of the stricture was accomplished.

THE LIGHTS AND SHADOWS OF A DOCTOR'S LIFE

Was the subject of an address by Dr. Joseph Mathews, of Louisville. The doctor's remarks were from the ludicrous to the grave, at times brought tears, and at times shouts of laughter.

THE SEWERAGE SYSTEM OF CHICAGO

Was the subject of a paper by Dr. John B. Hamilton, of Chicago, which was listened to with much interest in spite of the depth of the subject.

THE PRESIDENT'S ADDRESS

Was delivered by that official, Dr. C. H. Hughes, of St. Louis. After discussing and recounting the wonderful progress of medicine in recent years, the doctor then took up specialists and specialism. The true specialist should be largely a consultant to the general profession, and mainly indebted to it for his practice. In discussing moral and social relations he said that physicians are as a class, honest men. We are often charged with in-

competency, but seldom with dishonesty—never justly the latter, for medicine whatever her faults of head, has none of heart towards mankind. She is the peer of all professions. How medicine has helped mankind was next discussed, and the ways found to be quite numerous.

Non-political interference with public medical charities was considered. Where the spoils of political conflict were human victims, minds dethroned and sacrificed to medical incompetency and party policy we should secure for them the proper medical as well as custodial care. We should endeavor to so influence public opinion and to so use our ballots, that parties and politicians so politic and inhuman as to sacrifice the mental and physical, maimed or ill in public hospitals and others of our eleemosynary institutions whom it is our special duty, under Providence, to guard, shall know the profession's indignation and feel its power.

The doctor in politics has too long held aloof from the affairs of state, and as a consequence the great names of our medical history have no monuments to perpetuate their fame. Had we but looked well to our interests the President's Cabinet would long since have been represented by one member of the profession as law, agriculture, finance, etc., we should have the Medical Minister of Public Health for which the American Medical Association is just now pleading.

OBSERVATIONS ON SURGICAL TREATMENT OF UTERINE TUMORS

Was the subject of a paper by Charles A. L. Reed, M.D., of Cincinnati, at the meeting of the Mississippi Valley Medical Association, at St. Louis. He said there are certain solid tumors of the uterus that require no operation, but there are others which are uniformly recognized as demanding operation. They are for the most part rapidly growing tumors in young subjects: removable fibro-cystic tumors, soft œdematous tumors, large bleeding fibroids, and those growths which give rise to ascitic accumulations. Attention is called to certain other classes of tumors in which operation was not usually advised, but the demonstrated dangers of the growths rendered surgical interference important if not imperative. These cases are small tumors of sub-mucous polypoid development in which there is a sero-sanguineous discharge but in which a slight menorrhagia, but no further hemor-

rhage leads to apprehension of danger. Another class of smaller sub-mucous growths are generally pronounced bleeders, but the absence of gross enlargement of the uterus disarms apprehension on the part of the attendant. After citing at length a number of cases operated upon for these tumors the author drew the following conclusions:

1. All persistently hemorrhagic uterine myomata of whatever variety should be advised early operation.

2. In young subjects with multinodular tumors giving rise to alarming hemorrhage, the appendages should be removed when practicable as an alternative for total extirpation. But the latter operation should be done whenever the character of the growth will permit of its removal by dangers less than those which would be involved by its continued existence.

3. To those tumors already recognized as demanding operation should be added those of uterine development, which are liable to dangerous constriction by the uterine walls and in which their destruction by this means might induce sepsis.

4. All cases of subserous growth, indolent, yet progressive in character in which the tumor has become a menace to neighboring organs, whether hemorrhagic or not should have exploratory incision with reference; first, to removal of the appendages; or, second, of the neoplastic organ.

5. All growing tumors in women occurring beyond the menopause should be removed, if possible, by vaginal total extirpation, or by abdominal section.

6. All distinctly operable cases demanding interference should be advised operation at the earliest practicable moment.

PELVIC INFLAMMATION IN WOMEN—A PATHOLOGICAL STUDY.

A paper read by Dr. W. W. Potter, of Buffalo, before the Mississippi Valley Medical Association at its recent meeting, at St. Louis.

The author affirmed that pelvic inflammations and their residues constituted about one-third the diseases the gynecologists treat, hence the importance of frequent discussions of all moot questions relating to the subject. He briefly reviewed the anatomical relations of the pelvic organs, calling attention to their enormous blood and nerve supply, which became both their weak-

ness and their strength. He contrasted the pathology of Bennet (1843) with that of Emmet (1873), and the latter with the teachings of Tait, Price, Hegar and McMurtry of the present age. He referred to the pathological studies of Bernutz and Goupil of 30 years ago, and affirmed that the observations of the present had served to confirm the correctness of these pioneers.

He next asserted that the pathology of to-day had been established by operative surgery, which had shown that pelvic inflammation begins in the tubes or ovaries and extends to adjacent structures through absorption or by contiguity; that it almost never begins in the cellular tissue but may be carried there through the tubes and ovaries by infection, either puerperal or traumatic. He affirmed that the inflammation was in most cases a peritonitis, intra-pelvic or local in character and not a cellulitis; that para and perimetritis were misleading and confusing terms, hence should be dropped, and that the so-called pelvic abscess was a sequence of salpingitis, ovaritis or peritonitis, not a primitive accumulation in the areolar tissue itself.

The tentative management in these cases, rest, counter-irritation, hot sitz baths, vaginal douches, and attention to the digestive organs and general health, resulting in only temporary improvement, or in cure in a very small percentage. Those reported cured were generally, if the history could be known, subject to repeated relapses, and a frequently recurring pelvic peritonitis usually indicated leaky tubes. Electricity, too, had disappointed its most sanguine advocates and need not be considered.

In conclusion he asserted that if these views be accepted, the logical deduction was to watch the early manifestations of the disease carefully, that competent surgical skill be invoked before the danger to important structures became too great to justify the expectation of successful operation.

A REPORT OF CASE OF RETENTION OF URINE CAUSED BY URETHRAL CALCULI

Was made before the Association by J. V. Prewitt, M.D., of West Point, Ky.

The doctor stated that urethral calculi were usually formed with some foreign substance as a nucleus, piece of bougie, bullet,

peas, beans or pencils, which children sometimes introduce into the urethra. Any change in the system which causes an increased formation of any of the slightly soluble constituents of the urine favors the tendency to the formation of calculi within the urinary passages. After citing the details of his case and displaying specimens of the eighteen facettted calculi, weighing 403 grains, which were removed, the author concluded thus: There is no question as to what should be done for treatment, but how it can best be attained. The operative procedure must depend largely upon the peculiar feature of each individual case. If the stone be small it may be removed by the use of Gross' long urethral forceps, or if the stricture be very close it should be first disposed of by some of the recognized operations. In the majority of cases when the diagnosis has been made of calculi in the urethra, the staff should be introduced into the urethra and incision made down to the stone, when it can be removed at once.

SURGICAL CLINIC

OF

W. T. BRIGGS, M.D.,

Professor of Surgery in the Medical Department of the University of
Nashville and Vanderbilt University,

Reported by W. M. Brazelton, Medical Student.

EXCISION OF TWO-THIRDS OF THE INFERIOR MAXILLA FOR
OSTEO-SARCOMA.

The first patient presented to you this morning is Grundy —, a mulatto, aged 29, who was brought to the clinic for operation by Dr. —, of Alabama. He has, as you perceive, a tumor of the inferior maxilla, involving the left half of that bone and encroaching, by its size, extensively upon the face. Examined from within the mouth, the tumor is seen to encroach upon that cavity to a considerable extent. The swelling is larger than the closed hand, is uniformly smooth and regularly spherical over its external surface, uneven and nodulated over its mucous surface, hard and inelastic to the touch, no marked crepitus upon pressure, and moving with the jaw in mastication. Near the angle is a fistulous opening leading to diseased bone, from which is discharged a thin sanious, offensive fluid. Along the body of the jaw may be seen several scars, the result of incisions made at different times for the evacuation of abscesses. The disease was first noticed two years ago, following the extraction of a tooth.

The disease commenced a little anterior to the angle and gradually involved the body of the left side and lower portion of the ramus. Abscesses formed at irregular intervals, causing great pain and requiring evacuation.

The swelling was free from pain and was not tender on manip-

ulation, except when acutely inflamed. The deformity is excessive. Mastication is not yet interfered with to any great extent, that function being performed principally by the sound side. Lately the tumor has grown rapidly, and the patient is anxious to be rid of an unsightly swelling which might have a fatal termination.

As yet the patient's health has not suffered, but in the course of time the system would become involved, and the disease might include the entire bone.

It is therefore proposed to remove the diseased portion of the bone by excision. The operation of excision of the inferior maxilla entire or in part is usually attended with successful results. The credit of first performing this operation in this country belongs to a Southern surgeon, Dr. Deaderick, of Tennessee, who in 1810 removed the inferior maxilla for disease with perfect success. In the present case it will be necessary to remove nearly two-thirds of the lower jaw.

The disease does not extend to the temporo-maxillary articulation, and in order to preserve as much as possible of the facial contour, disarticulation at that joint will not be done, but the ramus will be sawn between the angle and the joint. An incision will first be made from the middle of the lip vertically, to below the chin and this is joined by another carried from the chin to the angle under the border of the jaw, where it is continued up behind the ramus to near the temporo-maxillary articulation. The tissues are rapidly dissected up so as to completely expose the growth, and its extent carefully noted. Before separating the buccal and genial attachments of the jaw the tongue is secured by passing through it a loop of silk thread. Anteriorly a tooth is extracted at the point where the saw is applied and the section effected by a small metacarpal saw. The ramus is cleared and divided in the same manner, and after severing the remaining soft attachments the bone is removed. After arresting the hemorrhage, and thoroughly irrigating the wound, it is packed loosely with iodoform gauze, the skin-flaps are brought into position and secured by a number of interrupted catgut sutures.

(The operation was performed as described; the tumor, however, was found to involve more of the right half of the jaw than was expected, necessitating section at the junction of the anterior with the middle third of the right half of the body. On the left side

the ramus was divided just below the sigmoid notch. The facial artery was the only one which required a ligature.

The specimen was examined and found to be as had been expected, osteo-sarcoma. The patient recovered rapidly, and was presented to the class three days after the operation with the extensive wound healed throughout its extent. He returned home ten days after the operation.)

TREPHINING THE SKULL FOR TRAUMATIC EPILEPSY.

This little boy, Charles M —, aged 12, of Kentucky, has been brought to us for relief of epilepsy, caused by an injury to his head, received when he was three years old, having been kicked by a mule. The blow was a severe one, causing an irregular lacerated scalp wound behind the junction of the sagittal and coronoid sutures. A marked depression of the bone was noticed, and the injury was followed by a prolonged period of unconsciousness from which he slowly recovered. The wound healed slowly and for a time he gave promise of a full recovery from the hurt, but about six months after the accident he was seized with a typical epileptic convulsion. After the first seizure he had a succession of attacks at irregular intervals, a marked feature being the greater frequency of the attacks. In one of the paroxysms, when about six years of age, he fell into the fire, receiving a burn of the second degree, which resulted in a badly crippled condition of the left arm and hand. As the patient grew older the attacks became more frequent and severe, and he seemed to recover more slowly from the seizures. The attacks occur now almost daily. It is difficult to learn in this instance whether the attacks are preceded by the premonitory manifestation known as aura, but most likely some kind of unusual sensation is experienced by the patient just previous to the convulsions.

A lamentable, but common, sequence of epilepsy is quite obvious in this case—impairment of intellect. From a highly promising intelligent child he is gradually merging into a state of imbecility. His memory is weak, his talk frequently silly and idiotic, and his expression weak and inane. It is the gradual but sure failure of the boy's mental power especially that has impelled the father to seek relief. Epilepsy is frequently the sequence of traumatism which leaves in its train some obscure irritation of the peripheral

nerves. While the disease most frequently follows upon lesion of the skull it is by no means necessarily confined to head injuries. The inclusion of a nerve in a cicatrix, a viciously united fracture, the long continued irritation of the necrotic process in bones, etc., often form the starting points of epilepsy. By removal of the source of irritation it is possible in many cases to effect a cure of the epilepsy. When it is due to a scar, the removal of the scar may bring relief; when the skull has been injured, so that a portion of the bone depressed below its level or an irregular surface on the inner surface of the skull creates the irritation, trephining and removal of the peccant bone may in many cases cure the epilepsy that results from the traumatism.

In the treatment of traumatic epilepsy resulting from head injuries, by the operation of trephining, I have been unusually successful. Out of nearly fifty cases, carefully selected for operation, I have relieved entirely in a majority of cases, partially in some, nearly ninety per cent.

In the case now before you I propose to give the poor boy a chance, by trephining the skull and removing the depressed portion of the bone. The head has been shaved and antiseptically prepared. You can see from your seats the marked depression of the skull and the irregular scar which outlines the depression. You observe the vacant expression of the face, the silly smile and the empty stare that betoken a weak mind. As he walks his gait is uncertain and unsteady. In his answers to questions his speech is slow and interrupted. His general health is excellent.

The operation will be done as follows: Under ether, a horse-shoe shaped incision sufficiently large to exceed somewhat the area of injury is made in such a direction as to favor drainage, and the flap, consisting of all the tissues of the scalp, dissected up so as to expose the depression. A trephine of one inch diameter is applied directly over the depression and a disc of bone removed. The depression not included in the trephine opening will be removed by the gouge forceps, all projecting angles being carefully rounded off. In dressing the wound care is taken to replace the flap loosely, only one suture being used to hold it in place. A drainage tube will be employed, and the wound lightly dressed with absorbent gauze.

(The operation was without special incident. The under sur-

face of the disc of bone removed presented a distinct groove. The patient recovered from the operation rapidly. Two slight seizures followed at intervals of one and three days after the operation, but after them no more occurred during his stay at the Infirmary. He left for home ten days after the operation with a fair prospect of being ultimately cured of epilepsy.)

FRACTURE OF THE CLAVICLE.

John A., white, 32 years of age, railroader by occupation, entered the hospital yesterday with fracture of the clavicle. While attempting to board a rapidly moving train he missed his footing and was thrown violently some distance, receiving the full weight of his body upon his extended left arm. He at once noticed that his left arm was powerless, all efforts at moving it causing violent pain; swelling and ecchymosis supervened rapidly over the clavicle near the shoulder, and the drooping of the shoulder of the injured side was at once noticeable. Examination of the injured side revealed a fracture of the clavicle at the junction of the middle with the outer third.

Fractures of the clavicle are met with next in frequency to fractures of the radius. They are caused by direct violence, as by blows received upon the part; or, as is most frequently the case, as in the case before you, due to indirect violence, as from falls upon the shoulder or extended hand. The signs of fracture are usually clear and unmistakable. Crepitus attends movements of the arm, mobility is manifest upon manipulation, and the deformity, consequent upon displacement of the fragments, quite marked. The enlargement, due partly to effusion and partly to displacement, is greater in this case than usual, owing to the fact that the fracture has occurred nearer the outer extremity of the bone than the inner. The fracture is most frequently seen nearer the sternal extremity.

The prognosis of fractures of the clavicle is, as a general thing, good as regards restoration of the functions of the limb, but in spite of the most careful treatment, in a majority of cases, more or less deformity, in the shape of a lump, remains at the site of fracture. The deformity is due to elevation of the sternal fragment while the acromial end is drawn inwards and downwards by the action of the pectoralis major and latissimus dorsi muscles,

and the weight of right shoulder and arm. The fracture can be reduced, as you may now observe, by elevating the shoulder at the same time carrying it backwards.

In the treatment of this class of fractures the indications are to maintain the parts in position by elevating the shoulders at the same time that it is carried backward. Of the numerous apparatus devised for that purpose, that one is best which most perfectly fulfill these indications. In a man whose restoration of function is of paramount importance to the disregard of deformity the simplest means of treatment as well as, in my opinion, the best consists of two large handkerchiefs, one of which is intended to hold the shoulder back while the other, used as a sling, serves to keep the shoulder elevated. Sayre's apparatus, consists of two broad strips of adhesive plaster, one fastened to the arm and encircling the body so as to throw the shoulder back, the other strip passed under the elbow and obliquely across the chest and back and meeting on the shoulder of the sound side, intending to elevate the shoulder. When the case is that of a young woman who is anxious to preserve the beauty of the neck, the treatment is the recumbent position, with a small pillow between the shoulders, and the arm in a sling. Union takes place in two weeks.

(The arm was dressed with the handkerchiefs as described above. The result was better, so far as regards deformity, than was expected. Good union resulted, and patient left the hospital in three weeks.)

FOREIGN CORRESPONDENCE.

ODDE, NORWAY, Aug. 3, 1891.

On Saturday I visited the Hospital for Spedalski, in Bergen. I rang the bell and presented my card to a leper who had opened the gate. He immediately ushered me in, and left me in the hands of an attendant, who asked if I spoke English. On entering the main building I saw a little boy, about 12 years of age, whose face was almost eaten away, and was covered with plasters. I was then led upstairs and shown through the male wards. The patients, nearly all, suffered with their hands and feet. The fingers were drawn and shortened as if burned, and the sense of touch was more or less impaired. Strange looking hands, those! They looked as if the fingers had been chopped off and then stuck into the fire to arrest hemorrhage. Though the fingers were shortened the nails were still there. The face was also pretty generally affected, sight destroyed, the eye-lids drawn, nose gone or flattened. Some faces showed a tubercular form. I asked a number of questions, but only a few answers were satisfactory, for the attendant spoke English poorly. I noticed that the legs and feet of a few were affected with elephantiasis. There was one patient who commenced talking English as soon as I entered his room. He was in a horrible condition, a mere skeleton, his hands and feet wrapped in bandages, his face was of that color of which you have read, his throat was affected and tracheotomy had been performed. He talked with great effort. I asked as few questions as possible, for the effort to reply seemed to exhaust him. He said he had always had leprosy, but it did not trouble him until he was 30 years old. Since then he had suffered terribly with his arms and legs. He seems to suffer more in Summer than in Winter. He is now 42 years old. He said he was weary of this life and was anxious to go into the next.

I was next shown the working room where those who could might pass their weary hours of waiting. Some were engaged in making shoes, others weaving, but most were employed with fish-nets.

There were a number of patients who had passed their 75th year. In the female ward I saw a married woman whose two young daughters were also inmates, and were with her. I saw one leper at the point of death—an old woman as white as snow, propped up in bed. Many of the women, those who retained any sense of touch, were knitting. Most of them seemed bashful and timid. One or two refused to show me their faces. I saw nearly all the patients, a few were in the garden enjoying the sun and fresh air. I was told that a few were cured, that is, the disease stopped, but there could not have been much left of them. The hospital was very clean and comfortable, but there was an odor that was almost unbearable at first, but I became accustomed to it in a short time.

There are now 109 patients there. Two years ago there were 200. I saw a number of them on the streets, who I suppose had been cured, for certainly they would not otherwise permit them to prowls around.

I have seen the Hospital for Spedalski, and spent half an hour in it, but I have no desire to go again. I was shown the chapel where they worship. This affected me as much as the patients themselves.

S. S. B.

Proceedings of Societies.

TRI-STATE MEDICAL SOCIETY OF ALABAMA, GEORGIA AND TENNESSEE.

The third annual meeting was held in Chattanooga, Oct. 27, 28 and 29, 1891.

FIRST DAY.

Society called to order by Vice-President E. T. Camp. Opened with prayer by Rev. D. Vance Price.

The Committee on Necrology offered a set of resolutions on the deaths of Drs. T. P. Gary, of Florida, and W. B. Wells and W. P. Craig, both of Chattanooga, which were adopted.

After reports of committees, and the transaction of some miscellaneous business, Dr. E. E. Kerr read a paper reporting

A CASE OF NEURO-MIMETIC HIP TROUBLE,

And presented the patient. This was a case in which the diagnosis of gonorrheal rheumatism had been made, but he was unable to see the case in that light. The nervous symptoms and the family history indicated a nervous element, and there was a hysterical element in the case. A partial cure was effected by suggestion, but the patient still walked on his toe, for which he could see no reason as there was no shortening nor tenderness about the hip, or other signs indicating organic disease.

Dr. Trippe said that he had treated the case before Dr. Kerr. The patient had had gonorrhœa four weeks before he saw the case. There was increased temperature (102° to 104°), there had been two marked chills, and the typical picture of gonorrheal rheumatism, although an hysterical element was recognized in the case.

Dr. Reeves thought the case one of involvement of the cord in which there was an attack of gonorrhœa and that set up a new train of reflexes. He called attention to the fact that every discharge from the meatus was not gonorrhœa, and as a test be stated that the discharge from a specific case was acid from a non-specific alkaline.

Dr. J. B. Cowan thought that the history as given by Dr. Trippe indicates some specific trouble, and if most of the members had seen the case it would have been diagnosed as gonorrheal rheumatism. Where we have such a specific trouble, and a history of masturbation as here, we would expect some hysterical symptoms. A man may have an hysterical joint just as a woman may have the globus hystericus.

Dr. Drake, from an examination and from the history, thought the case one of gonorrheal rheumatism. Wherever there is pain there must have been a cause, past or present.

Dr. Kerr had nothing to say as to the condition before he saw the case. He agreed that where there were neurotic symptoms it was a difficult task to make a diagnosis. He had brought the patient so as to find out how to make him stop walking on his toe for which he could see no reason.

AFTERNOON SESSION.

President Robert Battey presided. Dr. E. T. Camp, of Gadsden, Ala., read a paper on

THE SUMMER DIARRHŒA OF CHILDREN,

In which he gave as the causes: 1. Improper food; 2. High temperature; 3. Micro-organisms. In some cases there was a narcotic element. He reported one case where the diarrhœa was cured by circumcision, there being no change in the other treatment.

Dr. Battey asked if any of the members had any experience that would confirm the views of the writer that the prepuce might keep up the diarrhœa.

Dr. Gahagan had a case of persistent diarrhœa in which there was an elongated prepuce. He would circumcise the case and report next year.

Dr. Cowan had not noticed that the male children were more subject to diarrhœa than females. There was often fault in the diet both as to quality and, especially, quantity.

Dr. Berlin called attention to the fact that the Jewish children have diarrhoea as frequently as the gentiles, and could see no connection between a stomach loaded with bacteria and an abnormal prepuce.

Dr. Reeves said there was no specific cause or specific origin.

Dr. J. L. Atlee confirmed the experience of Dr. Camp. He had seen cases in which, after circumcision, the diarrhoea began to improve with no change in the other treatment.

In closing, Dr. Camp said that he had reported but one case in his paper, but that he had seen a number of others in which there was a like result.

Dr. George Wiley Broome, of St. Louis, read a paper on the report of

A CASE OF KOLPO-HYSTERECTOMY, INCLUDING A BRIEF REVIEW
OF THE PRESENT STATUS OF THE OPERATION,

In which he advocated the operation in all cases of epithelioma, or carcinoma of the cervix, or of the body of the uterus, regardless of the extent of the disease. Amputation of the uterus should never be performed.

Dr. Davis' experience had been that these cases, when sent to him, were too far advanced to justify an operation. He has not been convinced where but a limited part of the cervix was involved that an amputation was not as good as the radical operation. Many cases were morphine eaters, and the condition of the intestinal tract was one of importance.

Dr. Berlin thought total extirpation was better than high amputation. When the disease had passed beyond the uterus it was too late to amputate in either way.

Dr. Battey had grave doubts as to the advisability of the operation. In the early stage the diagnosis was difficult. In some of the cases sent him as cancerous, cures were effected by the application of iodine. Of cases reported cured he had grave doubts as to the diagnosis. On the other hand there were many deaths after the operation if not done within a short time. As in the case of Gov. Hill, many will not consent to an operation until a malignant growth has advanced beyond the stage when it can be removed.

Dr. Key preferred the clamp to the ligature. Early diagnosis

is of importance, and this can only be made by an expert pathologist, and as soon as made the uterus should be removed.

NIGHT SESSION.—ADDRESSES OF WELCOME

Were made by Dr. J. R. Rathmell, President of the Chattanooga Medical Society, and Col. Garnett Andrews, Mayor of the city. Dr. Robert Battey responded on behalf of the Society.

Dr. Geo. R. West reported

TEN CASES OF LAPAROTOMY

With one death. Three were for removal of diseased ovaries and tubes, one for the cure of oophoro-epilepsy, one for the removal of ovarian cyst, three for the relief of symptoms caused by uterine fibromata, two exploratory incisions. Of the nine recoveries, six were perfect cures, three partial cures from incomplete operations.

Dr. Davis said that it was the improved technique that gave success in these operations, which not only required book knowledge but also special training.

Dr. Broome advocated early operation. He insisted on sterilizing the instruments, and endorsed Arnold's sterilizer. Morphine should never be given after a laparotomy.

Dr. Reeves quoted Weir Mitchell, who said that in his experience he had sent thirteen cases to the surgeon, five of these were not improved.

Dr. Gardener said that the majority of cases operated on were not any better five years after the operation.

SECOND DAY

Opened with prayer by the Rev. J. W. Bachman.

After some miscellaneous business, Dr. Rob't Battey addressed the Society on

OVARIOTOMY; ITS USE AND ABUSE.

He said that the fundamental idea in the operation he had devised was to produce rest. The difficulty of curing many chronic diseases lies in the fact that rest is an impossibility, as with the heart, rest means death. Rest is an impossibility to an ovary.

The objects of the operations are:

1. The prolongation of life. Years ago Sir Spencer Wells said that he had added 5000 years to the sum of human life. Now it is probably double that.

2. The restoration of a disordered mind. There is a prejudice against operation, owing to the fact that cases have not been properly selected, and alienists want the ovariologist to cure their cases after they have exhausted every other means of cure when it is often too late.

Dr. Goodell asserted that an insane woman had no business with children.

Dr. Battey would hardly go so far.

3. The cure of epilepsy, as in the case of insanity, there should be some connection between epilepsy and ovaries. It does not follow that because a woman has epilepsy that her ovaries should be removed. Here Dr. Goodell had good results.

4. The relief of intolerable pain, especially when the pain has a tendency to produce that detestable habit, opium eating, a habit little worse than insanity. Where the habit has been formed the operation will cure the case if the woman can break the habit.

One of the abuses of the operation is to perform a single operation for the notoriety it would bring. This ought to be a specialty as much as the eye. Success depends on the skill of the operator which can come only from experience. It depends also on native ability, and every man should study his natural talents in the light of statistics and choose the field where he is most successful.

The operation for the purpose of ovariectomy to stop child-bearing is a detestable practice. The operation should never be done without ample consultation, first, to protect the physician, second in the protection of the interest of the profession at large, third, in the interest of the patient.

Dr. Davis thought that as much could be done by simply incising a muscle as by normal ovariectomy. The operation has no place in the treatment of nervous diseases.

Dr. Broome suggested as it was well known that ovariectomy produced atrophy of fibroid tumors, by cutting off the blood supply, therefore ligation of the uterine artery might produce good results.

Dr. Wilson advocated the operation in cases of mania, did not believe that insane women should have children.

To confirm Dr. Battey's views Dr. Cowan reported a case of epilepsy cured by the operation.

Dr. Battey in closing gave the indications for the operation viz:

1. The case must be desperate. 3. It must be incurable by ordinary means. 3. There must be a reasonable hope of cure.

In the last two years he had advocated the removal of senile diseased ovaries for the cure of insanity, citing cases.

Dr. W. E. B. Davis, of Birmingham, Ala., read a paper entitled

TREATMENT OF INFLAMMATIONS ABOUT THE HEAD OF COLON.

In which he said that cases must be selected for the operation. Important symptoms must not be masked by the administration of opium.

More reliance should be placed on regional tenderness than on the temperature. An inflammation about the head of the colon is nearly always an appendicitis, the involvement of surrounding tissues being secondary. Early operation is necessary.

Dr. Cunningham was of the opinion that the the whole question should be re-written. The peritoneum is always involved to a limited extent.

Dr. Shimwell said that the temperature may not be increased, and related a case confirming the statement. There is no rule when to operate, each case must be judged on its own merits.

Dr. Karl von Ruck, of Asheville, N. C. read a paper on

CURE OF TUBERCULOSIS ON THE PRINCIPLE OF NUTRITION

In which he said that the diagnosis with the microscope could not be made in the early stage. No one measure should be relied upon in the treatment. He was surprised that greater harm had not be done by the large doses of tuberculin that had been used. In the early stage the treatment was often inefficient when the cases could be cured. Climate was of importance and all measures that could benefit the patient should be employed.

Dr. Reeves advised the use of the microscope in all cases to confirm the diagnosis, if it be not tuberculosis it is syphilis.

Primarily the disease is due to the lymph stasis.

Dr. von Ruck called attention to the fact than in the early stage there is no sputum and no bacteria, so that the diagnosis cannot be made with the microscope.

Dr. J. C. Shapard, of Winchester, Tenn., read a paper on

MILK SICKNESS

Stating that the disease existed only in a limited area, that it was contracted from the cow. The poison seemed to be neither animal nor vegetable, but mineral. The disease called trembles in the cow resembled lead poisoning in man.

Dr. Cowan said that the subject was of so much importance that the government had offered a reward for the discovery of the cause. He had seen one case and thought at first it was one of lead or cobalt poisoning.

Dr. Reeves said that the bacteria had been found, that they were spirillum, for which quinine was the best remedy.

Dr. J. B. Murfree, of Murfreesboro, Tenn., read a paper on

THE NECESSITY FOR ASEPSIS IN PRIVATE OBSTETRICAL PRACTICE.

He advanced the idea that it was more necessary to protect the wounded surface here than in an open wound. The decreased mortality in hospital practice he thought due to the use of antiseptics. In private practice cleanliness was necessary and sometimes antiseptics, especially should the hands be clean and the examinations be as few as possible.

Dr. Baxter endorsed the paper in the main, but thought that in private practice the danger of infection ten times as great as in hospital practice. The nurses should be watched, as they know nothing of surgical cleanliness.

Dr. Shimwell thought that the injury to the mother was a factor in these cases that was overlooked. Whenever there has been a post-mortem great injury to the tissues has been found.

Dr. Cowan thought the great secret was cleanliness, but that antiseptics have their place.

In a large number of cases observed, Dr. Wilson had not found the results any better with antiseptics than with simple cleanliness with sterilized water. The results were as good where the patients were aggregated as where they were segregated. Vaginal irrigation was not necessary, for the cases did as well as by simply washing the vulva.

Dr. Cunningham thought with Dr. Shimwell that the result was often due to traumatism. He always uses the Credé method of expelling the placenta.

NIGHT SESSION.

At 8 p. m. an elegant reception was tendered the members at the residence of Mr. and Mrs. W. R. Wilson, 329 East Terrace.

THIRD DAY—MORNING SESSION

Opened with prayer by the Rev. Robert J. Willingham.

Dr. W. G. Bogart, of Chattanooga, read a paper on

LACERATED CERVIX.

He advocated the operation only when there were troublesome symptoms produced by the laceration, and other measures fail. He described the operation mainly as laid down by Skene. The causes of failure were imperfect preparation of patient, imperfect operation, or imperfect after treatment.

Dr. Camp said it was necessary to remove all the cicatricial tissue. Silver sutures are the best. Douches are not necessary. He does not indorse the use of ergot after delivery.

Dr. Davis said the paper presented the present status of the operation. The condition requiring it could be prevented by proper attention after confinement. Ergot is of use after confinement, not only to cause contraction of the uterus, but it also closes the mouths of the small vessels and lessens the danger of septic poisoning. He examines all of his patients six weeks after confinement, if possible. In subinvolution the Faradic current is of value, despite the assertions of many, that electricity was of no use in gynæcology.

Dr. Reeves had gotten good results in these cases by supporting the womb with a Fowler pessary, and had cured some by this means. He gave eight minim doses of ergot after confinement.

Dr. Bogart in closing the discussion said that he gave support to the uterus in these cases but that he preferred to do this with medicated lamb's wool tampons instead of using a hard rubber pessary.

Dr. J. W. Drake, of Chattanooga, presented a paper on

THE PHYSIOLOGY AND CHEMISTRY OF THERAPEUTICS.

In this he maintained that the infectious diseases are caused by

ptomaines or toxines evolved by bacteria in the body. He proclaimed that "chemical antagonism" was "the safest, the most scientific and most rational means of cure" rather than that of "physiological antagonism." He argued that all bacterial toxines had an antidote for which we should look. The tendency was to return the specific medication along more scientific lines. The age demands rational medicine.

Dr. Purdon called attention to the fact that the antiseptics were used thirty years ago, empirically, for he had used the permanganate of potash in cholera. He had also used the peroxide of hydrogen.

Dr. S. T. Shimwell, of Philadelphia, read a paper on

ARTIFICIAL ANUS VS. ANASTOMOSIS.

Dr. John E. Purdon, of Cullman, Ala., read a paper on

THE CONSERVATION OF ENERGY IN MODERN PSYCHICS.

In which he claimed that in the face of established facts of mental and physical action at a distance, nothing was left to the physiologist but to acknowledge the existence of an extra-muscular mode of the externalization of energy in relation with conscious or subconscious will and design. He held the opinion that the ether of space had its physiological, as well as its physical side, and that as the reservoir of the work-doing power of the universe it bore a relation to the Universal Life analogous to that which the blood and the nervous system held to the individual spirit. He based his theory of an etherial nervous medium upon the results of his own sphygmographic researches which showed the similarity of the pulse traces of individuals *en rapport* during extraordinary manifestations of energy, such as "knockings" and "telepathic influence."

Dr. Purdon deposited publicly with the Secretary the photographs of a selected set of pulse tracings, taken by himself, in illustration of the above view, and claiming the absolute originality of the method for himself.

Dr. Cowan said that the grandest result of energy was thought. Arrangements of matter by the correlation of forces have this power. This we derive from solar force.

Dr. Cunningham thought that we know nothing about the matter.

Dr. Drake took issue with Dr. Cowan, that the original force was solar, for energy existed before the sun was made, and came from the Deity.

To this Dr. Cowan assented.

Dr. J. P. Stewart, of Attalla, Ala., read a paper on

EVOLUTION FROM A SCIENTIFIC STANDPOINT.

In which he advocated the doctrine from scientific considerations.

Dr. Drake said that the reproductive energy in the human ovum was the unseen hand of God moulding its protoplasm into a perfect form.

Dr. Purdon said that man belongs to a different class from the lower animals. Evolution is true as a formula—as a partial formula.

AFTERNOON SESSION.

Dr. Henry Wm. Blanc, of Sewanee, Tenn., gave his experience in

A BRIEF REVIEW OF FIVE YEARS' DERMATOLOGICAL PRACTICE In New Orleans. He reported 2013 cases seen in public and private practice, 25 per cent. were eczema. Elsewhere the per cent. is 30 or 35. Epithelioma, in the form of rodent ulcer, figured conspicuously in the report. A large number of leprosy cases were reported, many of these cases were of foreign birth or children of foreigners. The author believes in the contagiousness of leprosy, but thinks that in many of his cases the disease was contracted from some animal source, as in eating raw meat, or in preparing meat for the table.

Dr. R. M. Cunningham handled the subject of

CROUPOUS PNEUMONIA.

A paper was read by Dr. Y. L. Abernathy, of Hill City, Tenn., on

DOCTORS.

Dr. W. P. McDonald, of Hill City, Tenn., read a paper entitled

LEGISLATION,

Which was not discussed, as it dealt in political matters.

NIGHT SESSION.

Dr. W. C. Townes read a paper on

ANGINA PECTORIS,

In which he gave as the conditions in the disease: 1. Pseudo-angina pectoris; 2. That form in which there is sclerosis of the co-

ronary arteries; 3. Where there is valvular disease. The treatment depends on the cause. In the first form we have a neurosis, and we correct anything we find at fault with any of the organs; secondly, we give tonics, potash, iodine, arsenic, nitrites; thirdly, we prescribe during the attacks such drugs as amyl nitrite, chloroform and opium.

Dr. Drake thought angina pectoris a symptom rather than a disease, sometimes the result of organic lesions, but often merely a cardiac neuralgia. He uses nitro-glycerine with atropia for the pain.

Dr. Purdon gives as routine treatment the salicylate of soda where it is caused by cold lowering the temperature. This is combined with strophanthus to prevent relapses.

Dr. Camp believes it to be due to a rheumatic diathesis, and uses chloroform by inhalation.

Dr. Wert would be afraid to give chloroform, owing to the pathology.

Dr. Purdon said that by no means must electricity be used.

Dr. Baxter did not think chloroform specially dangerous, and cited cases.

Dr. Cunningham believes in giving atropia and nitrite of amyl. He did not consider an intermittent pulse to contra-indicate chloroform.

Dr. Townes closed by saying that he did not lay much stress on the above treatment.

Dr. Knykendall, of Chattanooga, read a paper on

BROMIDE OF ETHYL AS AN ANÆSTHETIC,

Advocating its value and safety when given for a short operation (one minute), and in dose of not over a drachm. It is given free from air. Anæsthesia is complete from one-half to one minute. The effects last about two minutes, when the patient awakes as from a natural sleep. Nausea is seldom produced.

Dr. Davis said that one accustomed to give ether was not safe to give chloroform, and it might be so with this. The deaths may have been due to faulty administration. Nitrous oxide was a rapid anæsthetic, and was considered the safest.

Dr. Smith suggested that if the doctor would give the number of cases observed by him it would be of interest.

Dr. Berlin said that an objection was the odor. He related two deaths from the drug.

Dr. Gahagan asked Dr. Kuykendall for the mortality. How anæsthesia was produced, and the antidote.

Dr. Kuykendall replied that there had never been a fatal case unless the administration had been prolonged. Dr. Chisholm had used it in 300 cases without a bad result. So far as he knew there had been but two deaths. He did not know how it kills or how it produces anæsthesia. The antidote is the same as in threatened death from chloroform.

Dr. Willis F. Westmoreland, of Atlanta, discussed

BRAIN SURGERY,

Saying that the surgeon had gone into the brain where the physiologist had said that they could not go. An exploratory incision into the brain substance was just as justifiable as in laparotomy. In abscesses and tumors there has never been a cure without operation. Where the incision has been thorough the results have been good. The safeguard is antisepsis, without which there is uncertainty. In operating the ventricles must be avoided.

Dr. Drake argued that the surgeon had never gone farther than the physiologist had mapped out for them. They dare not invade the 4th ventricle in the vicinity of the respiratory center.

Dr. Westmoreland reminded Dr. Drake that it was not due to the physiologists but to the fact that some years ago a man had recovered after a crowbar had gone through his brain.

Dr. Berlin related a case of insanity coming on after an injury to the skull, cured by an operation, with a relapse and a second cure by the same means.

Dr. Crumley believed that all functions were localized, some areas can be invaded, others cannot.

Dr. Cunningham said that most of these cases would die without operating, and that the surgeon was justified in doing anything that offered the least hope.

Dr. Stewart reported a case of brain surgery where the whole frontal bone was taken away.

Dr. Westmoreland said that to Dr. Briggs, of Nashville, Tenn., was due the credit of the first to do this work.

A paper by M. L. Bullard, of Columbus, Ga., was read, asking, Should not

OCULISTS BE MORE CAREFUL IN PRESCRIBING COLORED GLASSES, In which he showed that smoked glasses were generally better than colored glases, and that there was more serious objection to curved glasses for the reason that they possessed some refractive power when we wanted a plain glass.

OFFICERS ELECTED.

The following are the officers elected for the ensuing year:

President, W. E. B. Davis, M.D., Birmingham, Ala.; *Vice-Presidents*, D. H. Howell, M.D., Atlanta, Ga., J. C. Shapard, M.D., Winchester, Tenn., J. P. Stewart, M.D., Attala, Ala.; *Secretary*, Frank Trester Smith, M.D., Chattanooga, Tenn.; *Treasurer*, B. S. Wert, M.D., Chattanooga, Tenn.; *Recorder*, W. L. Gahagan, M.D., Chattanooga, Tenn.; *Councillors*, J. B. Murfree, M.D., A. S. Frix, M.D., John E. Purdon, M.D., G. W. Drake, M.D., J. W. Clements, M.D., S. T. Camp, M.D.

Extracts from Home and Foreign Journals.

SURGERY.

INOCULATION FOR ANTHRAX.

Dr. Sadonkski has recently published in the St. Petersburg *Medizinische Wochenschrift* the result of experiments he made for the purpose of studying the questions of immunity against anthrax. Cultures of anthrax bacilli were sterilized by heat, and then injected into cats and horses. An increase of temperature took place, which lasted from one to four days, but the animals remained healthy. Twenty days after the last of a series of injections the cats had cultures of virulent anthrax bacilli injected, and two cats, which were to give the desired material, were also inoculated in the same way. The two cats died in six days. Two other cats, previously made immune, died much later, and no bacilli could be discovered in their blood. One cat, which had previously received three injections of sterilized cultures, lived. It soon recovered from the high fever of reaction after the injection with virulent bacilli, and even increased in weight. —*The Lancet*.

DEATH UNDER A. C. E. MIXTURE.

A lad, aged 18, recently died in the Hereford Infirmary while under the influence of the A. C. E. mixture. He was a subject of stone in the bladder, and Dr. Nicholson, the house-surgeon, informs us that the anæsthetic was administered on an Ormsby's inhaler, 6 drachms of the mixture being used. The patient never came fully under, for he resisted the passage of a catheter into

the bladder, and at the time the pulse ceased his bladder was being filled with water by the operating surgeon, Mr. Turner, F.R.C.S., previous to performing lithotomy. He had no cardiac bruit, and had taken some kind of anæsthetic, probably chloroform, some months before. In addition to other post-mortem symptoms, we are informed that both ureters were very distended, the right one easily admitting the finger. Death was due to sudden and unexpected arrest of the heart's action, for the pulse was full and good up to the very second it ceased, and respiration of a natural kind went on for more than a minute after the heart's action ceased.—*Brit. Med. Jour.*

THE TREATMENT OF FRACTURES OF THE LEG.

Dr. N. A. Pohell, of Toronto, has published in the *Canada Lancet* a memoir on *Preferable Methods of Fixation in the Treatment of Simple and Compound Fractures of the Leg*. He maintains that plastic appliances are the best for the fixation of fractures of the leg in all their forms and at all stages of their treatment. The sole exception to this rule is that Dupuytren's rigid single splint is preferable in cases of Pott's fracture accompanied by marked and persistent outward displacement. For the early fixation of simple fractures the best and safest appliance, according to Dr. Powell, is a plaster posterior splint. It is made by soaking several layers of the coarsest cloth in a cream made by sifting (not stirring) plaster-of-paris into warm water. The cloth is cut so as to fit the back of the leg and sole of the foot, and is deeply nicked on each side opposite the ankle, so that the sole-piece may be applied to the foot without making creases in the cloth. The splint is then firmly bandaged with a cotton roller; it is best for the surgeon to hold the limb in position until the plaster sets. In the latter stages of all simple fractures of the leg, that is to say, after the first week, the complete encasement of the limb by plaster bandages is the preferable plan of treatment. In treating compound fractures of the leg, posterior and anterior splints made of plaster-soaked gauze are ordinarily the best for fixation. Exceptionally fenestrated or bracketed plaster splints may meet the indications more perfectly. The great success in the treatment of compound fractures brings new dangers to the surgeon. "Men who formerly died now recover, and, if not turned

out models of manly symmetry, are very prone to listen to the suggestions of Ishmael and Ananias, and to try and recover damages from those to whom they owe debts of gratitude for life prolonged."—*Brit. Med. Jour.*

MEDICAL

ACUTE RHEUMATISM CONFINED TO THE TEMPORO-MAXILLARY JOINT.

The British Medical Journal of Dental Science reproduces a report by Dr. Gallpe, published in *Le Progres Dentaire*, of a case of acute rheumatism confined to the temporo-maxillary joint. It occurred in a patient of rheumatic diathesis. The symptoms were swelling of the cheek on the right side, with redness and pain on pressure; mastication and talking were both painful, with exacerbations at times. Pressure over the temporo-maxillary joint caused sharp pain. The upper and lower wisdom-teeth on the same side felt as if raised in their sockets. There had been no toothache. Careful examination of these teeth revealed no decay. The diagnosis was made of an attack of acute rheumatism in the right temporo-maxillary joint, and the patient was put upon salicylate of soda and quinine, rapid recovery resulting. Dr. Gallipe considers that the feeling of raising in the teeth was due to an attack of rheumatism in the alveolodental membrane itself, or rheumatic periodontitis, rather than simply the extension of pain from the affected joint.—*The Lancet*.

CHLORINE WATER AND QUININE IN TYPHOID FEVER.

Dr. Burney Yeo recommends as the best antiseptic in typhoid chlorine water with quinine. It is made by putting thirty grains of powdered chlorate of potash into a twelve-ounce bottle, with forty minims of strong hydrochloric acid, the bottle is to be corked, the gas allowed to generate, then water is to be poured in little by little and well shaken with the gas, and finally twenty-four or thirty-six grains of quinine and an ounce of syrup of orange-peel are to be added; of this mixture an ounce is to be given

every two, three or four hours. In the early stage, first week, one or two full doses of calomel, five to ten grains, are recommended, especially if there is constipation.—*Medical Record*.

THE KEELY CURE FOR DRUNKENNESS.

Mr. John F. Mines, known as "Felix Oldboy," who recently wrote an article which appeared in the *North American Review* for October, endorsing from personal experience the Keely bichloride-of-gold cure for drunkenness, which article has been extensively noticed in the daily press, was arrested last week for being drunk, and taken to Blackwell's Island, where he died from the effects of alcohol.—*Boston Med. and Sur. Jour.*

IODIDE OF POTASSIUM IN DIPHTHERIA.

Zenenko, (Cincinnati Lancet Clinic), speaks highly of the treatment of diphtheria by iodide of potassium. In adults the drug should be given from five to eight grains every two to four hours, up to one-half to one drachm a day. In children from one to fourteen years of age, single doses should range from a half to three grains. The administration should be continued until the appearance of iodism and incipient separation of false membranes, which usually occurs on the second, third or fourth day. As adjuvant means, he employed hourly gargling, with a two or three per cent. boracic or salicylic acid lotion with glycerine and tincture of geranium or camphorated spirit; further inunctions of gray mercurial ointment (from one scruple to one drachm twice a day) were used for enlarged cervical and submaxillary glands, while stimulants, quinine, etc., were freely given.—*Boston Med. and Surg. Jour.*

NICOTINE POISONING.

A merchant while shaving himself inflicted a slight wound on the lower lip. Not minding the trivial injury thus occasioned, he shortly afterward smoked a cigar. During the following night the lower portion of the face became very much swollen. No treatment availed, and he died after great suffering. His attending physician believed that in smoking some nicotine was absorbed by the wound.—*Med. Neuigkeit.*—*Weekly Med. Review*.

OBSTETRICS.

PAINLESS AND UNCONSCIOUS PARTURITION.

Professor Tarnier (*Journal des Sages Femmes*, July 10, 1891) describes a case of a woman who came into his wards with a threatening shoulder presentation. M. Chambreland rectified the mal-position by external version, and brought down the head, though the membranes had broken half an hour before. A few hours later a child's cries were heard; the midwife in charge inspected the patient and, to the surprise of both, found the child, entirely delivered, between the thighs of the mother. Dr. Tarnier once delivered a woman who would persist in laughing and talking all the time; the child was safely delivered after a few contractions—for they could not be called "pains," as she declared that they caused her no suffering. On another occasion he found a woman actually asleep in his ward, and the child, just born, lay between her legs. Another woman near term came to the hospital because she was alarmed at the rapidity of previous labors. He examined her and found that labor was in progress. She expressed a desire to have an action of the bowels, but Dr. Tarnier forbade her to leave the room. She rose and tried to go out, he held her back, and the child was suddenly delivered. The expulsion of the child was to the mother simply like passing a motion. Dr. Tarnier once opened a mammary abscess in a farm girl of herculean strength and proportions. He was asked to attend her during her confinement, and consented. But when sent for, he found her delivered already. She declared that she felt no pain, simply something slipping away. Dr. Tarnier declares that a child can easily be delivered unconsciously into the pan of a water-closet. In such a case the cord will be torn across; a clean cut would afford evidence of a crime. The subject, however, is very difficult from a medico-legal aspect.—*Brit. Med. Jour.*—*Brooklyn Med. Jour.*

Editorials, Reviews, Etc.

PUBLISHER'S NOTICE.—The JOURNAL is published in monthly numbers of *Forty-eight pages*, at one dollar a year, to be always paid in advance.

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Business communications, remittances by mail, either by money-order, draft, or registered letter, should be sent to the Editor, C. S. BRIGGS, M. D., Cor. Summer and Union Streets, Nashville, Tenn.

All communications for the JOURNAL, books for review, exchanges, etc., should be addressed to the Editor.

CLOSE OF VOLUME LXX.

Nearing the approach of a new year and the commencement of another volume of the JOURNAL, it is natural that we should review our course during the past year, examine into the present status of the JOURNAL, and address a few words to our kind readers to whom we continue to be so much indebted for kind wishes and patronage. It is with pardonable pride that we can declare that at no time in its history has the JOURNAL ever been in as prosperous a condition as at present. Our efforts at improvement have met with the most gratifying encouragement, both on the part of the profession and on the part of advertisers. Our list of subscribers is constantly growing. The price of subscription, one dollar per annum, for nearly six hundred pages of reading matter, puts the JOURNAL within the reach of every one. The advertising department is filled with advertisements of the most approved and worthy articles. The corps of contributors is made

up of writers whose articles reflect credit alike upon themselves and the JOURNAL. No pains have been spared to make the JOURNAL a readable, practical, wide-awake periodical. In this connection it may not be out of place to ask our readers to assure us of their continued good will by notifying us to continue their subscriptions—although the postal law holds every one who takes the JOURNAL out of the office a subscriber—we would prefer to receive due notice of every one whether he wishes his subscription renewed or stopped. Let every one consider it his duty to do so, and lose no time in sending us a postal card before the commencement of the new year. We shall consider it a special favor to have all our subscribers notify us of their intentions and shall appreciate prompt observance of this request accordingly.

In conclusion, kind readers, trusting that we may be for many years associated as editor and subscribers, an association which has ever been pleasant and agreeable to us, and we hope equally so to you, permit us to wish for you in the coming holidays a merry Christmas, and, in the ensuing year, a progressive prosperity.

WE regret very much that an unusual amount of original material has abridged our space so as to exclude editorial and book notices. Full amends will be made in our next.

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